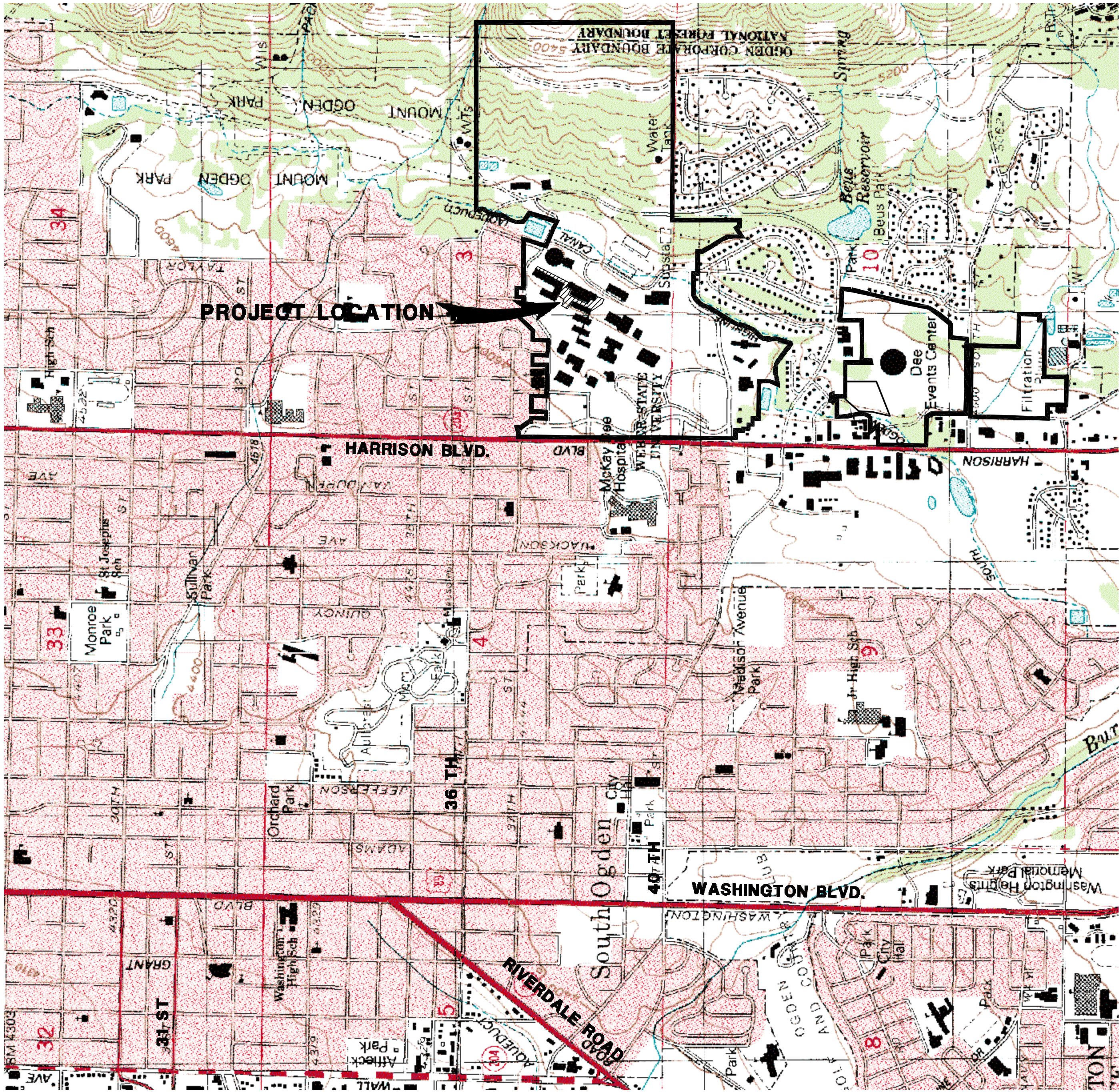


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PETERSON PLAZA

DFCM PROJECT NO. 05070810



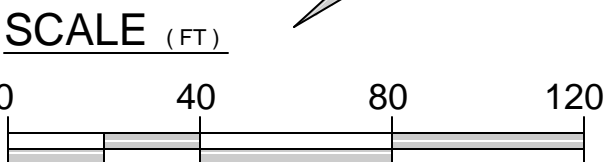
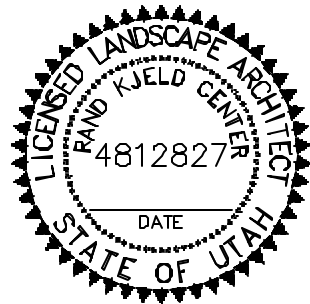
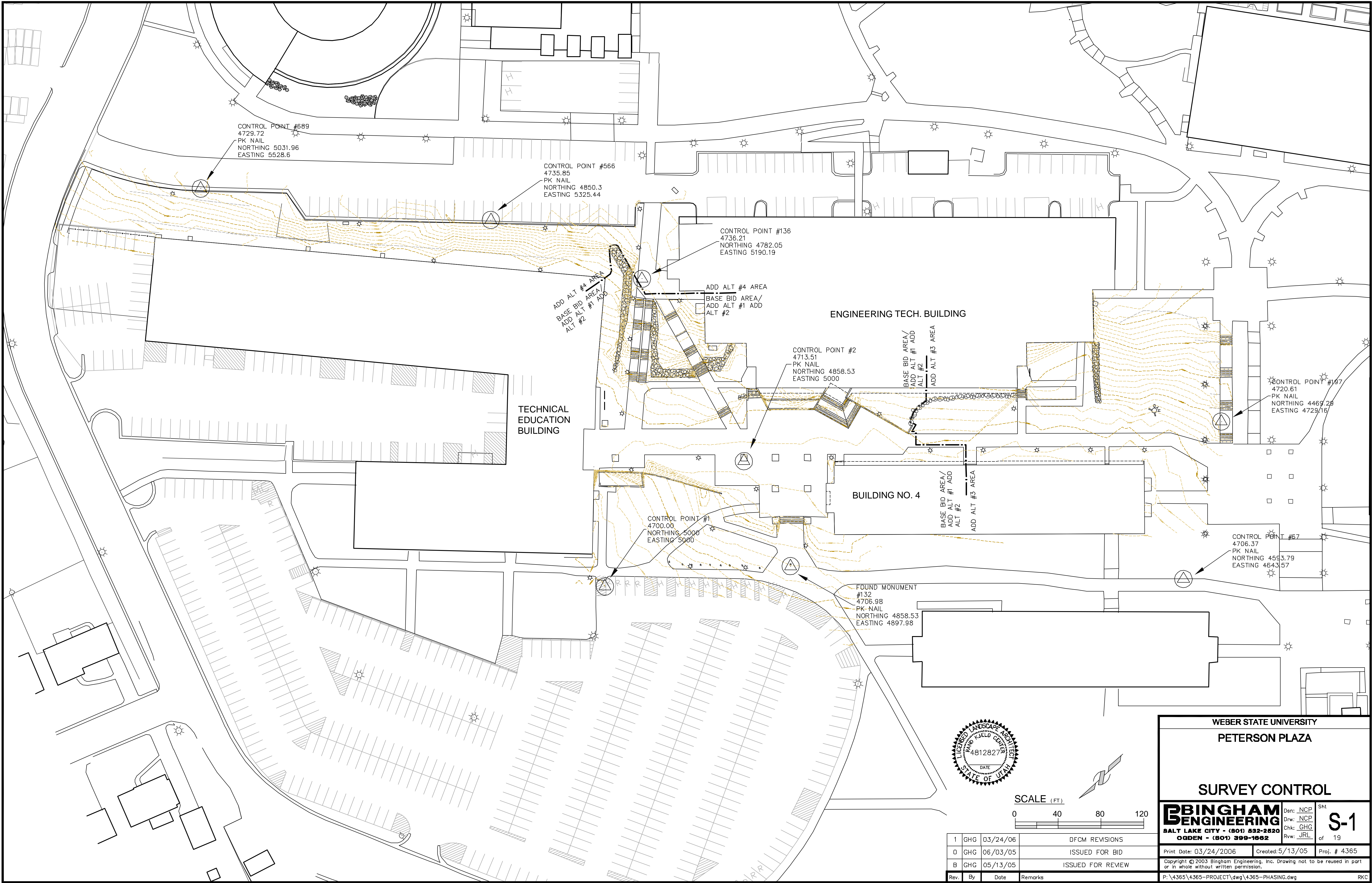
VICINITY MAP

SHEET INDEX:

S-1	SURVEY CONTROL
S-2	PHASING PLAN
S-3	DEMOLITION PLAN
S-4	DEMOLITION PLAN
S-5	DIMENSION PLAN
S-6	DIMENSION PLAN
S-7	PAVING LAYOUT PLAN
S-8	SITE PLAN
S-9	SITE PLAN
S-10	SITE DETAILS
S-11	SITE DETAILS
S-12	SLEEVING PLAN
S-13	GRADING PLAN
S-14	WALL SECTIONS
S-15	WALL ELEVATIONS
S-16	WALL ELEVATIONS
S-17	DRAINAGE PLAN
S-18	DRAINAGE DETAILS
S-19	DRAINAGE DETAILS
I-1	MAINLINE PLAN
I-2	IRRIGATION PLAN
I-3	IRRIGATION PLAN
I-4	IRRIGATION NOTES AND SCHEDULE
I-5	IRRIGATION DETAILS
I-6	IRRIGATION DETAILS
P-1	PLANTING PLAN-TREES
P-2	PLANTING PLAN-TREES
P-3	PLANTING PLAN - SHRUBS
P-4	PLANTING PLAN - SHRUBS
P-5	PLANTING PLAN - WEED BARRIER FABRIC PLACEMENT
P-6	PLANTING SCHEDULE & DETAILS
P-7	PLANTING NOTES & DETAILS
E-1	LIGHTING PLAN

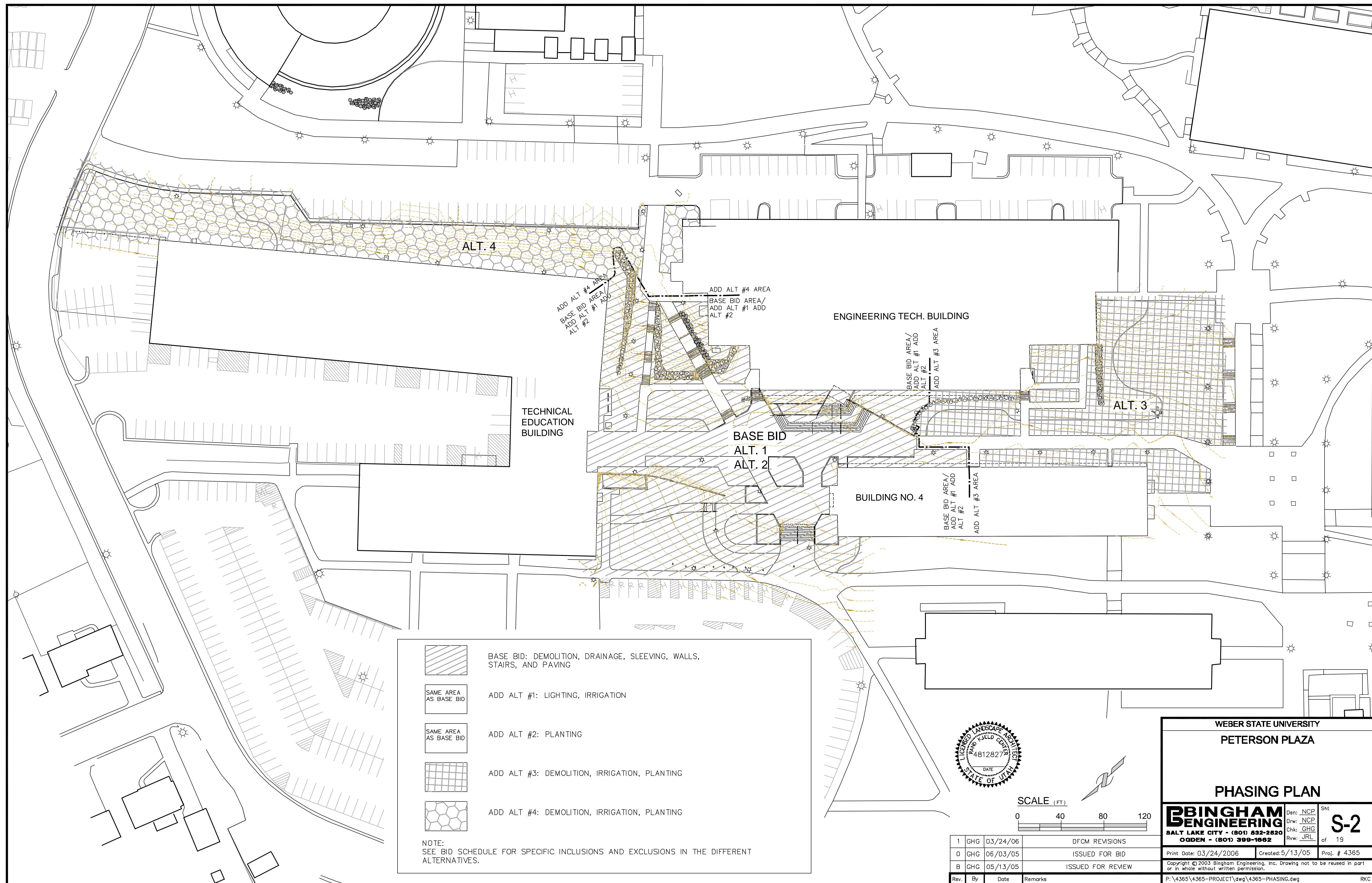
LANDSCAPE ARCHITECT

BINGHAM ENGINEERING
5160 WILEY POST WAY
SALT LAKE CITY, UTAH 84116
(801) 532-2520



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PETERSON PLAZA			
SURVEY CONTROL			
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OGDEN - (801) 389-1662		Chk: GHG	
		Rvw: JRL	
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1	GHG	03/24/06	DFCM REVISIONS
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- 1

PROTECT AND SAVE EXISTING TREE

2

REMOVE EXISTING TREE, INCLUDING ALL BRANCHES AND SUBSTANTIAL ROOTS WITHIN THE DRIP LINE, AND DISPOSE OF LEGALLY OFF SITE. FILL HOLE WITH SCREENED TOP SOIL TO PROPER GRADE.

3

PROTECT NEW STAIRS.

4

RELOCATE LIGHT AND PROVIDE NEW BASE.

5

SALVAGE EXISTING POLE LIGHT. REMOVE EXISTING BASE; PRESERVE WIRING FOR FUTURE USE IN NEW LIGHT LOCATION-SEE ELECTRICAL PLANS.

6

REMOVE EXISTING RETAINING WALL.

7

REMOVE OLD EXISTING STAIRS.

8

PRESERVE AND PROTECT EXISTING ROCK RETAINING WALL.

9

PRESERVE AND PROTECT EXISTING SHRUBS.

10

REMOVE EXISTING SHRUBS.

11

REMOVE EXISTING BOLLARD LIGHT.

12

PROTECT EXISTING LIGHT POLE.

13

PRESERVE AND PROTECT EXISTING HYDRANT.

14

SALVAGE EXISTING PLAQUE FROM ROCK SURFACE. ROCK MAY THEN BE USED IN NEW RETAINING AREAS.
- REMOVE CONCRETE PAVING AND STAIRS.

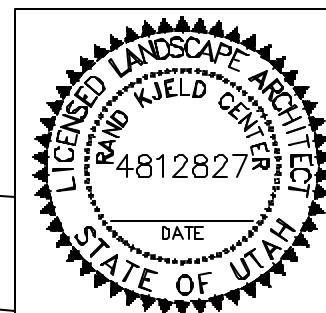
REMOVE ALL VEGETATION, WALLS AND ANY MISCELLANEOUS MATERIAL.

REMOVE LAWN.

GRUB AND CLEAR TO A DEPTH OF 4". PROTECT TREES UNLESS NOTED OTHERWISE.

ENGINEERING TECH. BUILDING

BUILDING NO.4



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DEMOLITION PLAN

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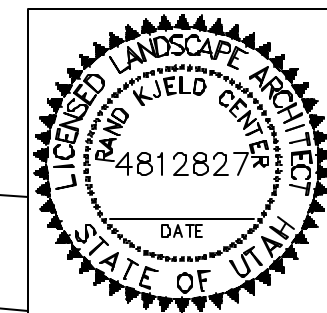
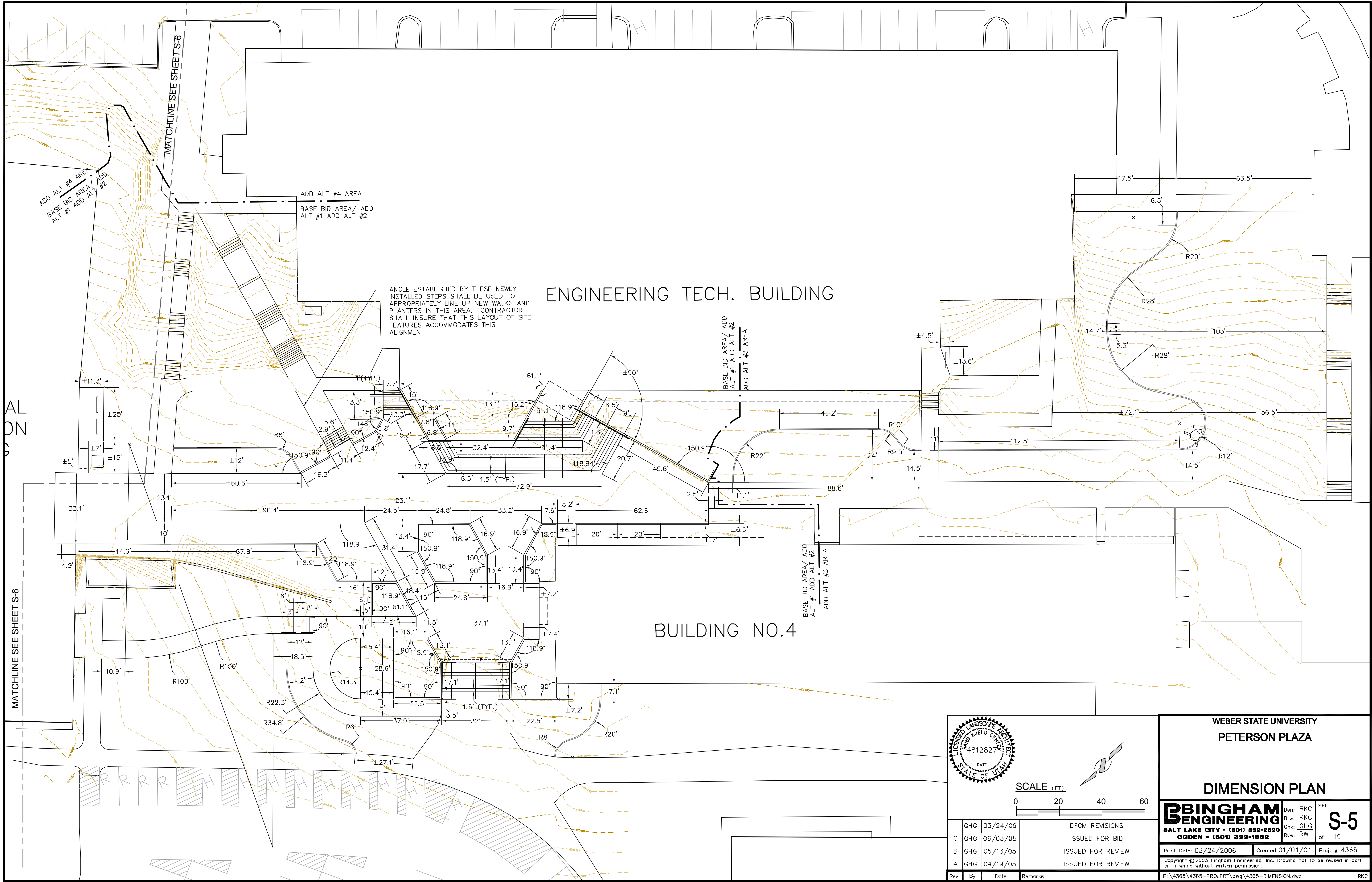
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Sht

S-3

of 19

RKC

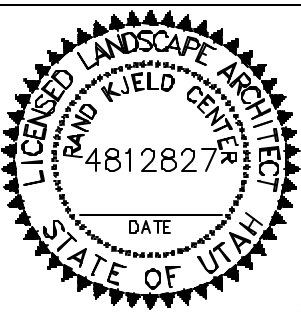


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DIMENSION PLAN		
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S-5

of 19



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DIMENSION PLAN

B

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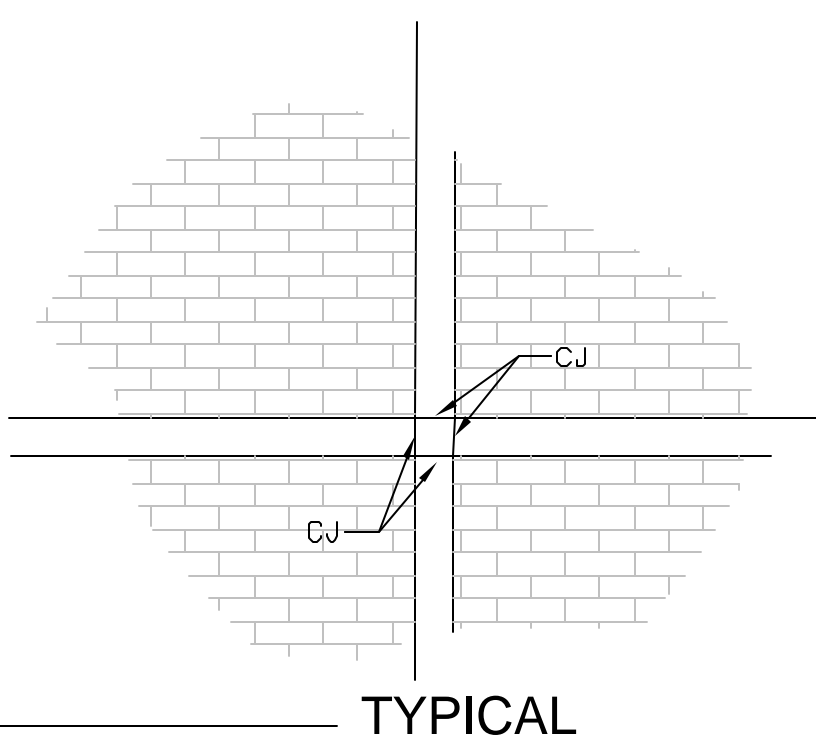
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RKC

ENGINEERING TECH.

LEGEND

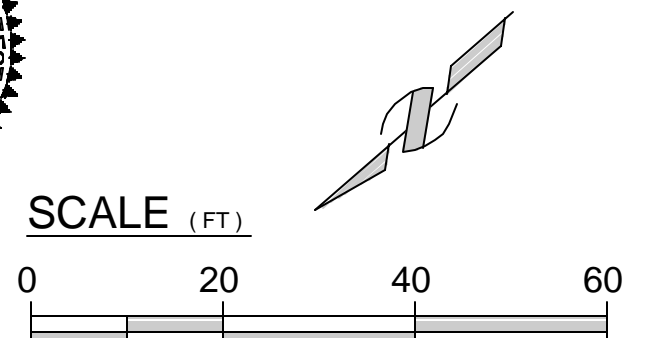
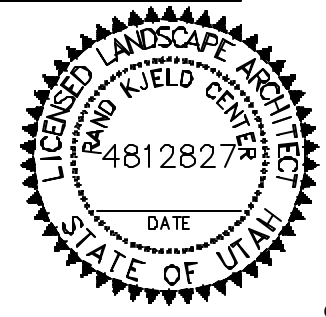
- 12" CONCRETE BAND
- 1/2" FELT EXPANSION JOINT (see detail A sheet S-9)
- CONTROL JOINT (see detail A sheet S-9)
- CONTROL JOINT ALING BANDING (see detail A sheet S-9)



BASE BID AREA/ ADD
ALT #1 ADD ALT #2
ADD ALT #3 AREA

POINT OF ORIGIN
(N 4768.45, E 4972.03)
GRID LAYOUT IS 20.5'X20.5'
O.C.

BUILDING



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PAVING LAYOUT PLAN

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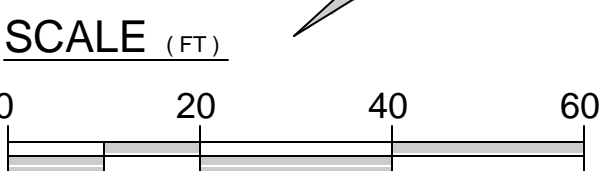
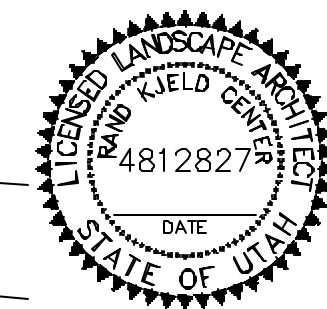
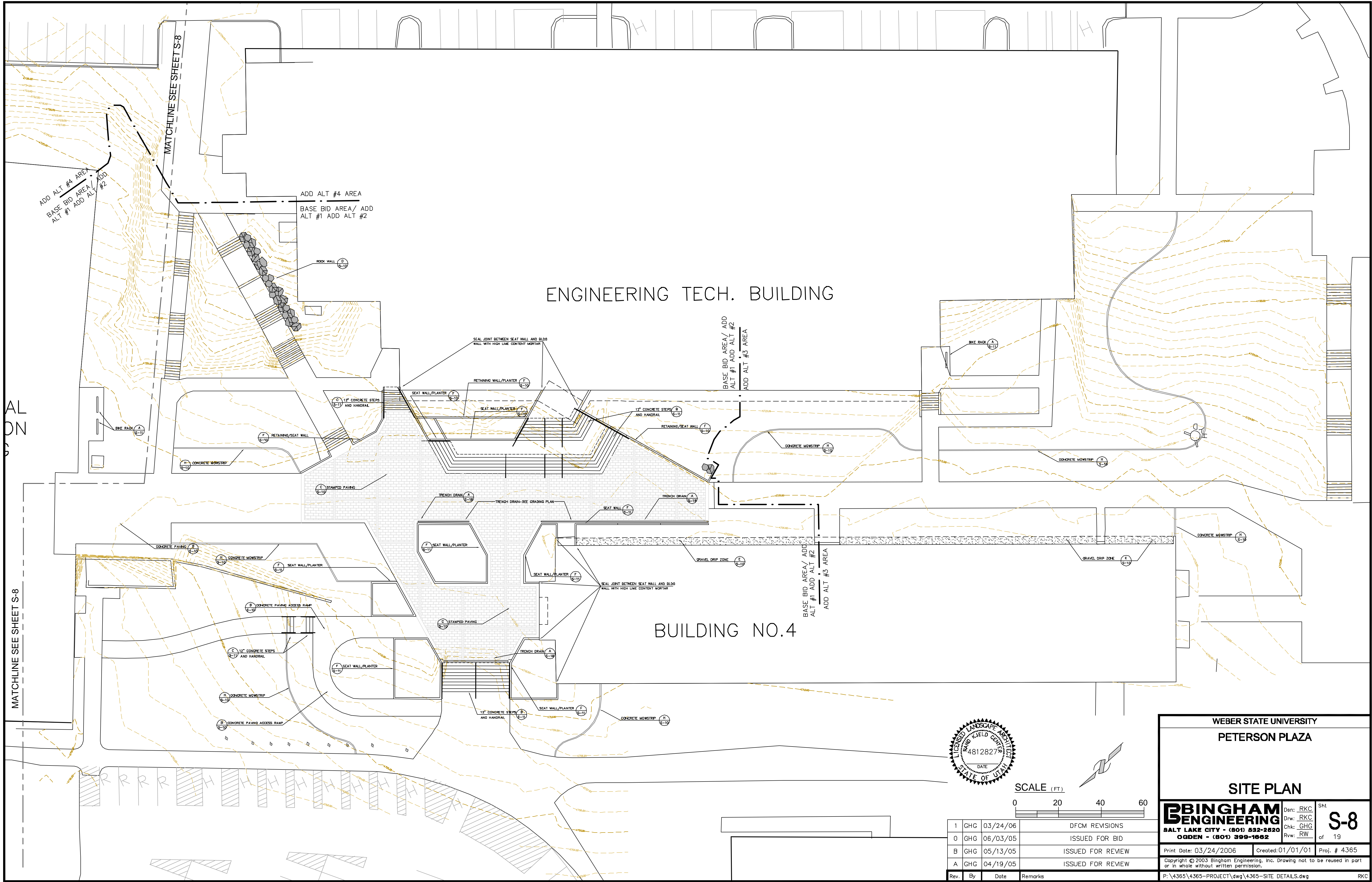
Dsn: RKC
Drw: RKC
Chk: GHG
Rvw: RW

Sht. **S-7**
of 19

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Rev.	By	Date	Remarks

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SITE PLAN

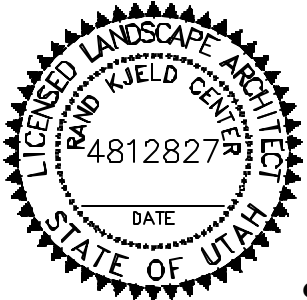
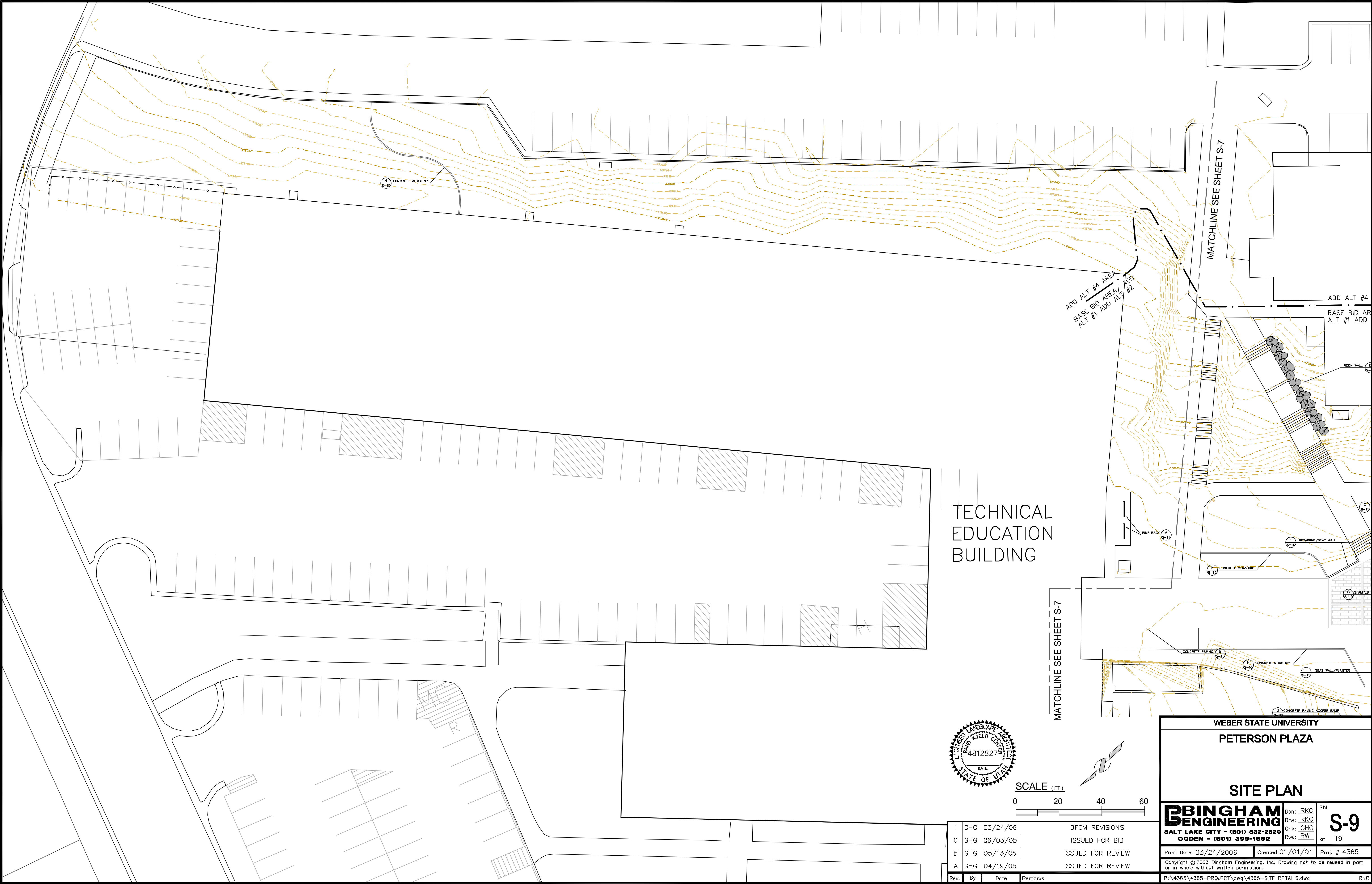
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Chk: GHG
Rvw: RW

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of 19

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SITE PLAN

B

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Rvw: RW

Sht

S-9

of 19

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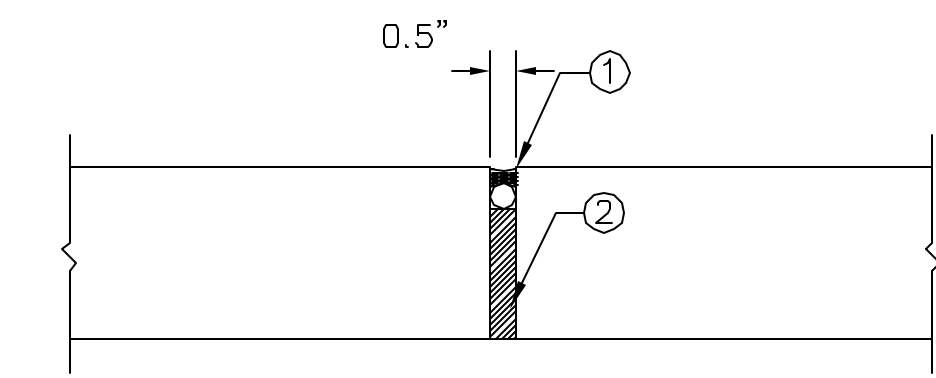
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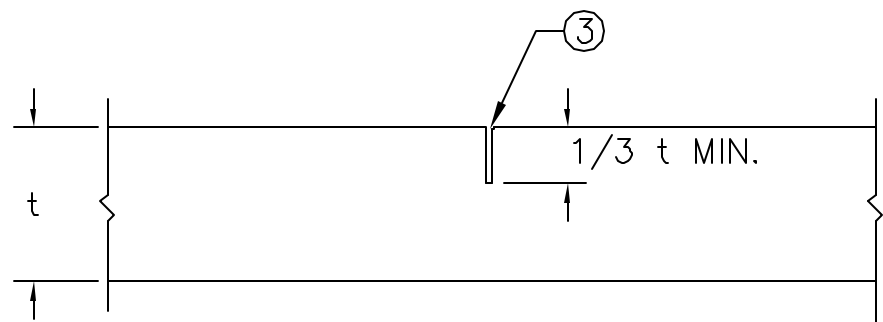
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RKC



EXPANSION JOINT

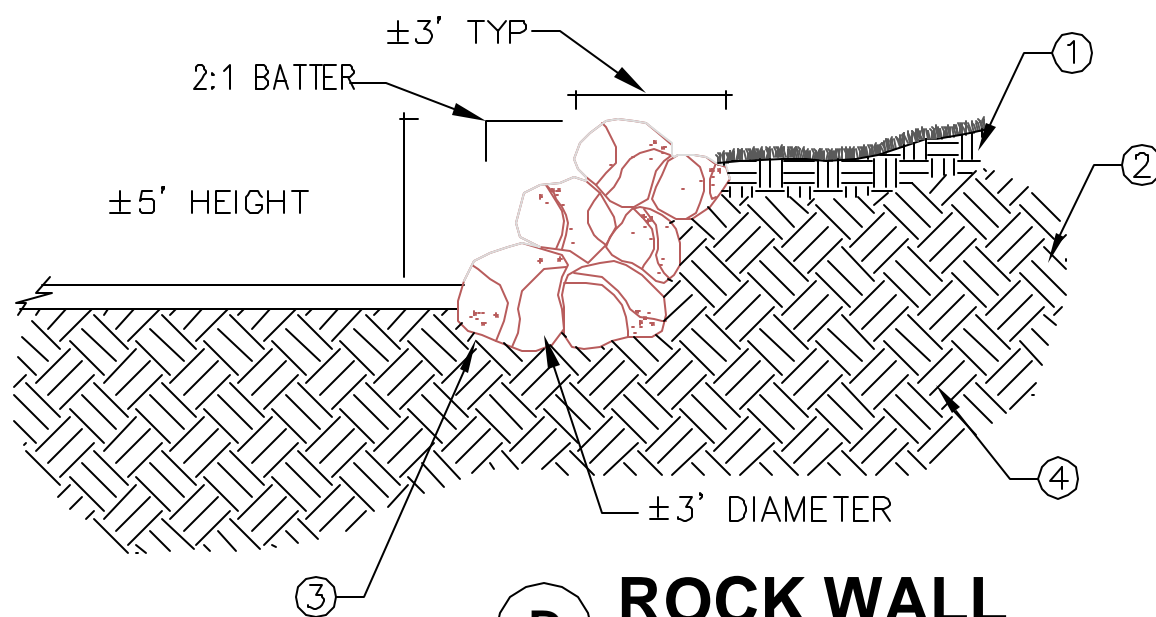


CONTROL JOINT

A SLAB JOINTS

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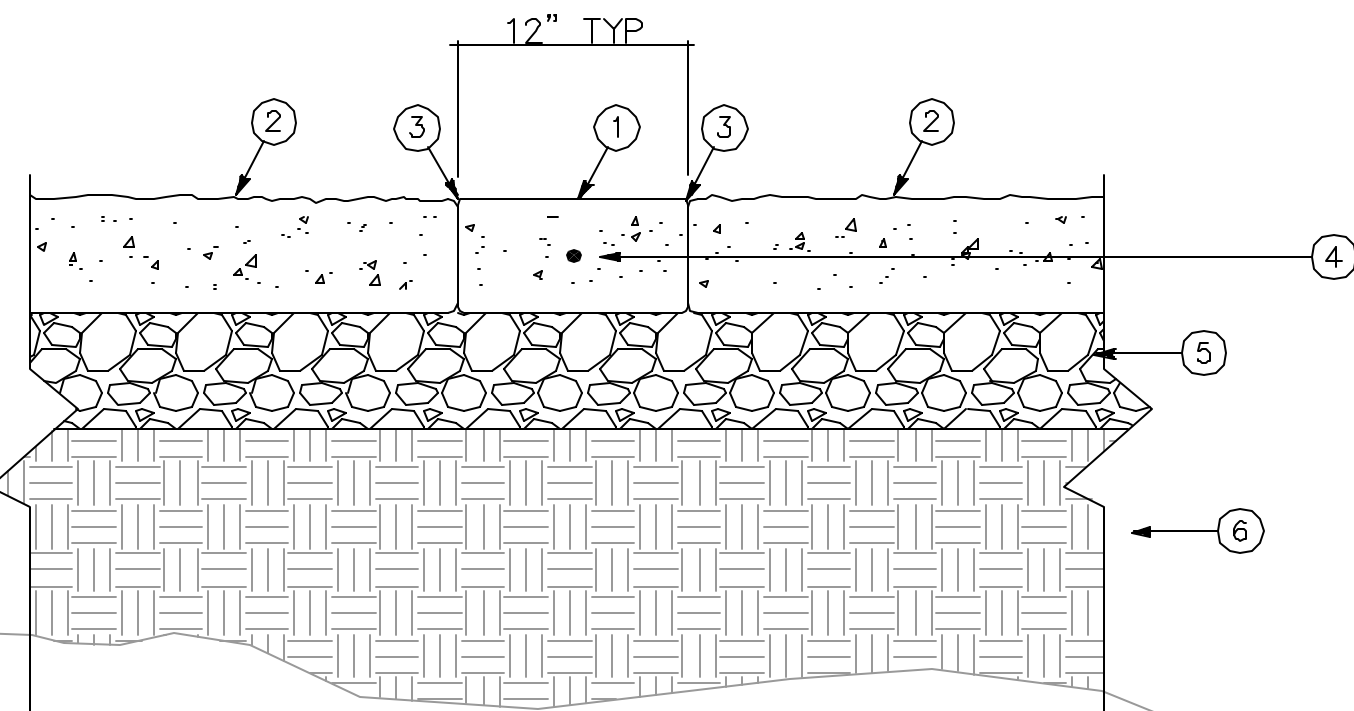
- 12" TOPSOIL (TYP.)
- BASE SHALL BE THOROUGHLY COMPACTED TO 95% RELATIVE DENSITY BEFORE BOULDERS ARE PLACED
- BOTTOM ROCKS SET 2' BELOW FINISH GRADE
- 95% COMPACTED SUBGRADE (USE SITE SOIL WHERE POSSIBLE)



D ROCK WALL

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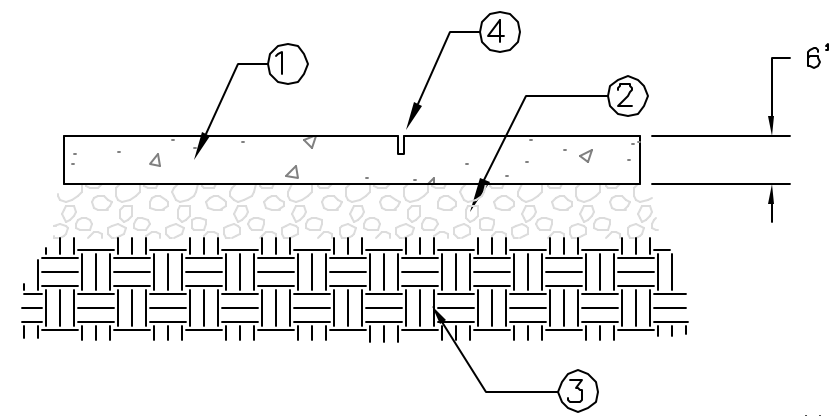
- 12 X 6 INCH CONCRETE BANDING (MIN 2000 PSI AT 28 DAYS)
- COLOR STAMPED CONCRETE (see detail above)
- 1/2" RADIUS TROWELED EDGES (TYP.)
- #3 REBAR CONT. (LAP 12" AT SPLICES)
- 6" ROAD BASE COMPACTED TO 95% DENSITY.
- UNDISTURBED OR 95% COMPACTED SUBGRADE



G CONCRETE PAVING BAND

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NOTE: PROVIDE CONSTRUCTION OR CONTROL JOINTS AND EXPANSION JOINTS AS SHOWN ON PLANS.



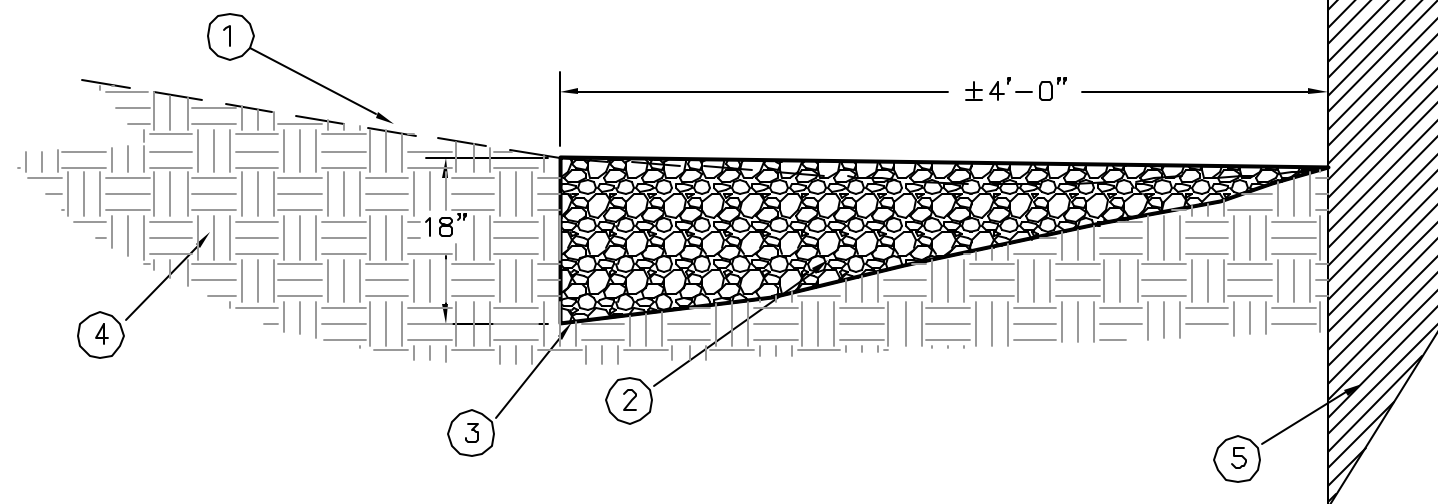
B CONCRETE PAVING

NTS COPYRIGHT (c) 2005 by Bingham Engineering

- 6" CONCRETE PAVING W/ MEDIUM BROOM FINISH
- 6" UNTREATED BASE COURSE (3/4" MINUS)
- UNDISTURBED OR 95% COMPACTED SUBGRADE
- CONTROL JOINT - SEE ACCOMPANYING DETAIL A

NOTE: ALL CONCRETE FLAT WORK SHALL CONTAIN FIBERGLASS REINFORCEMENT PER WEBER STATE UNIVERSITY CONCRETE SPECIFICATIONS. NOTE DOES NOT APPLY TO COLOR STAMPED CONCRETE.

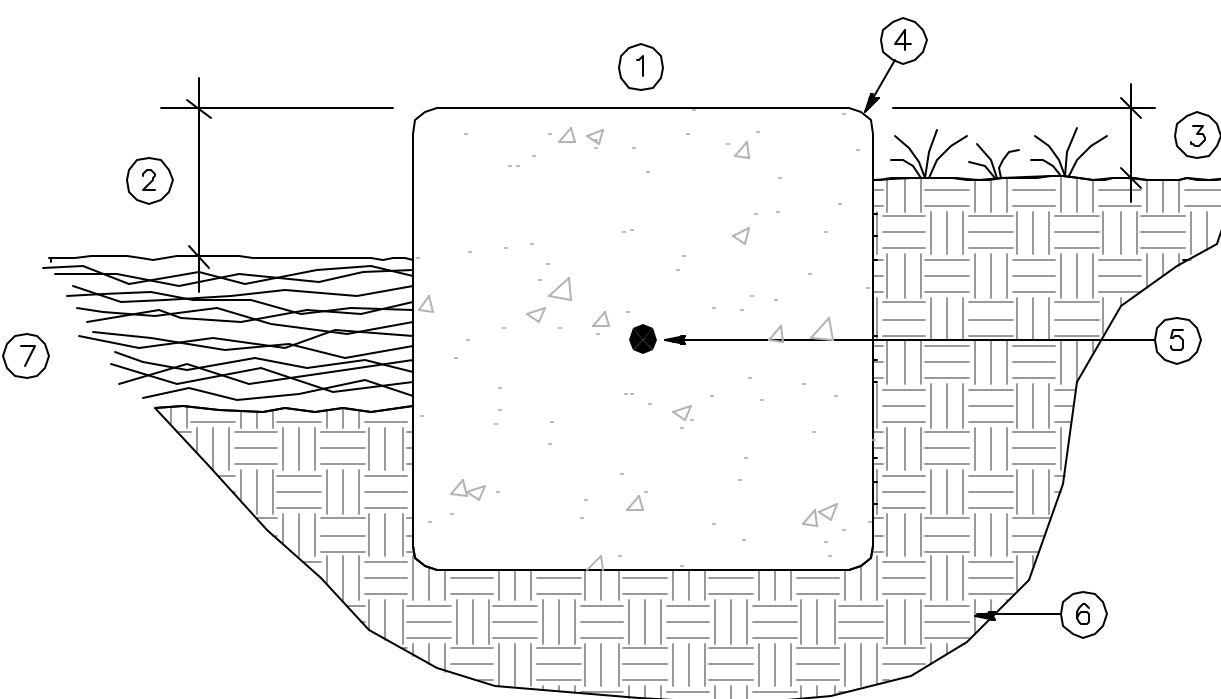
- EXISTING GRADE-SLOPE VARIES
- 1" GRAVEL DRAINAGE AREA
- PROPOSED GRADE-SLOPE VARIES
- EXISTING SITE SOIL
- BUILDING



E GRAVEL DRIP ZONE

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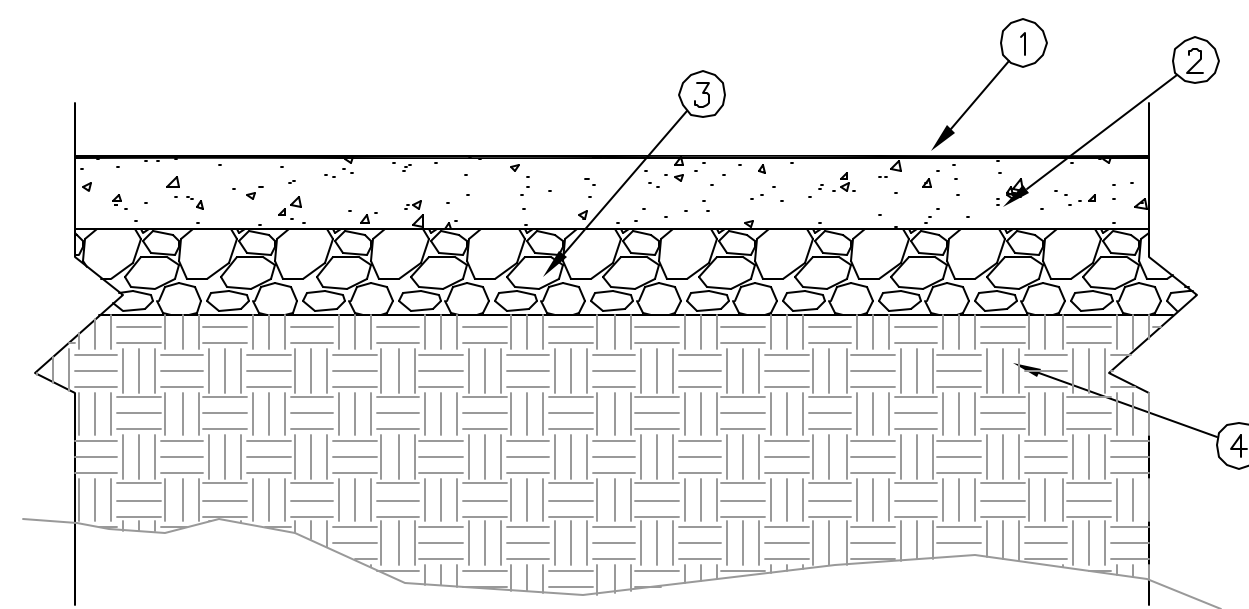
- 6 INCH SQUARE CONCRETE MOW STRIP (MIN 2000 PSI AT 28 DAYS)
- FINISH GRADE AT 2" FOR GROUNDCOVER AREAS
- FINISH GRADE FOR LAWN AREAS: 1" FOR SEED; 1 1/2" FOR SOD
- 1/2" RADIUS TROWELED EDGES (TYP.)
- #3 REBAR CONT. (LAP 12" AT SPLICES)
- UNDISTURBED OR 90% COMPACTED SUBGRADE
- 2" LAYER SHREDDED BARK MULCH IN PLANTER BEDS



F CONCRETE MOWSTRIP

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NOTE: PROVIDE CONSTRUCTION OR CONTROL JOINTS AT 5' O.C. MAX. AND EXPANSION JOINTS WHERE MOWSTRIP ABUTS ANY MASONRY TYPE IMPROVEMENT.

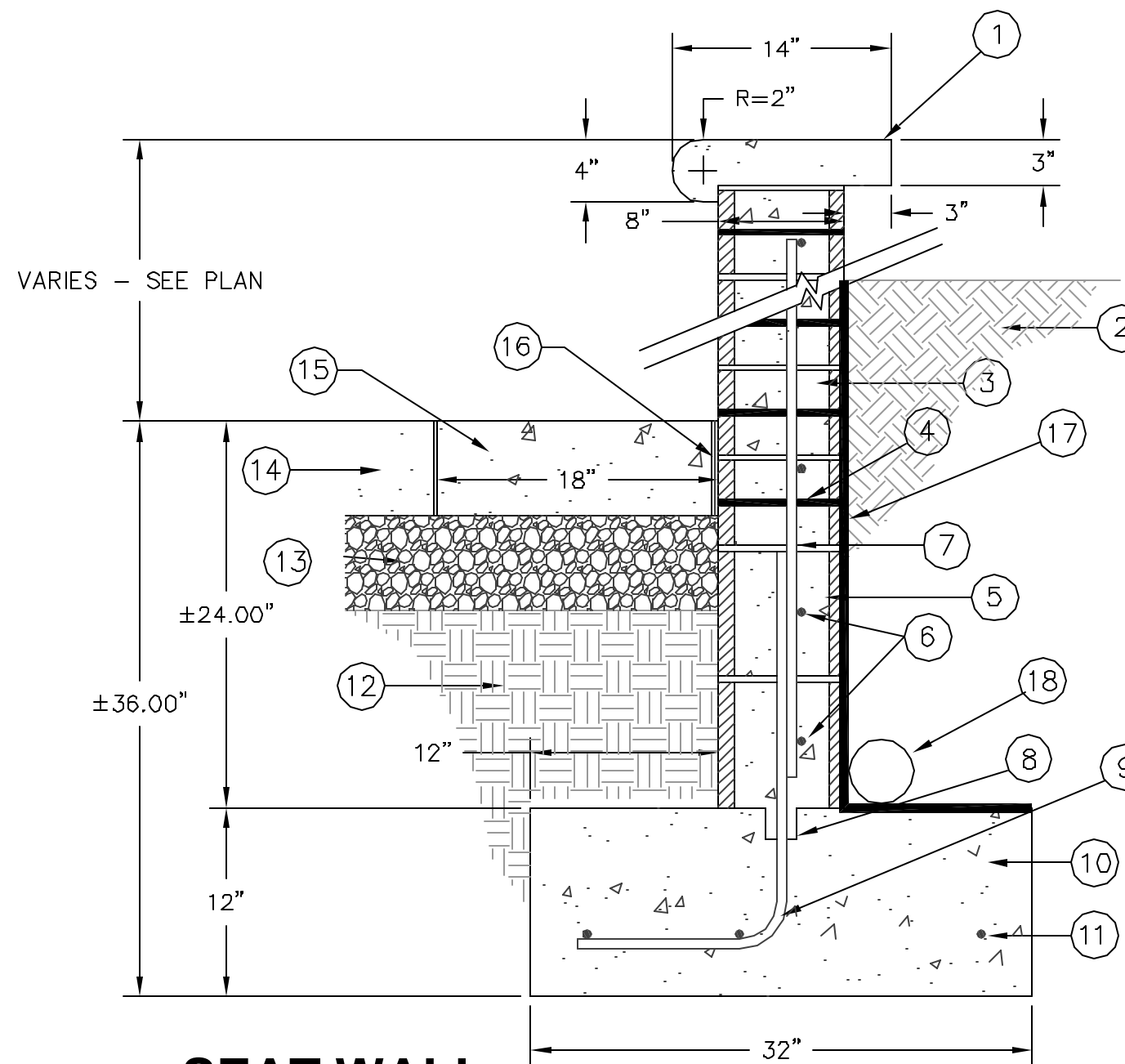


NOTE: SEE PLANS FOR SPECIFIC COLORS AND PATTERN.

C COLOR STAMPED CONCRETE

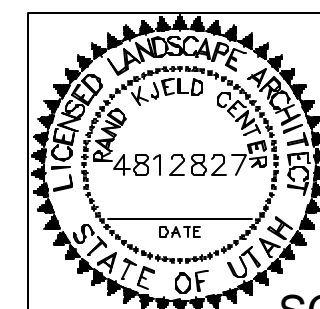
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- PRE-FABRICATED CONCRETE CAP AS MANUFACTURED BY MODERN PRECAST, INC. CONTACT BRUCE @ (801)466-1374. INSTALL CAP SO AS TO DRAIN MINIMALLY BACK INTO PLANTING AREA. INSTALL CAP PER MANUFACTURER'S RECOMMENDATIONS.
- TOP SOIL IN PLANTER
- 2 1/2"x16"x8" ATLAS BLOCK WALL - GOLDEN BUFF - GROUT 100%. AS MANUFACTURED BY INTERSTATE BRICK. CONTACT ALAN HAWS @ (801) 233-8654.
- PLACE 6"x6" W2.9xW2.9 HORIZONTAL MESH @ 6" O.C. VERTICALLY (EVERY OTHER BLOCK)
- 8"x16"x8" STANDARD CMU BLOCK BELOW GRADE ONLY - GROUT 100%.
- #4 HORIZONTAL REBAR 24" O.C., MINIMUM OF 1.
- #5 VERTICAL REBAR 15" O.C.
- 2" CONSTRUCTION KEY
- #5 "J" REBAR @ 15" O.C.
- CONCRETE FOOTING
- 3 - #5 REBAR CONT.
- COMPACTED SUBBASE - 95%
- 6" COMPACTED ROADBASE
- 6" CONCRETE PAVING - COLORED & STAMPED FINISH
- 6" CONCRETE BORDER - MEDIUM BROOM FINISH, 18" WIDTH
- 1/2" FELT EXPANSION JOINT
- WATERPROOF MEMBRANE - WATCHDOG POLYMER-ENHANCED ASPHALT LIQUID-APPLIED MEMBRANE (OR APPROVED EQUAL). INSTALL FROM FOOTING TO SOIL LEVEL, BACK SIDE OF WALLS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- WALL DRAIN (see details)



C SEAT WALL

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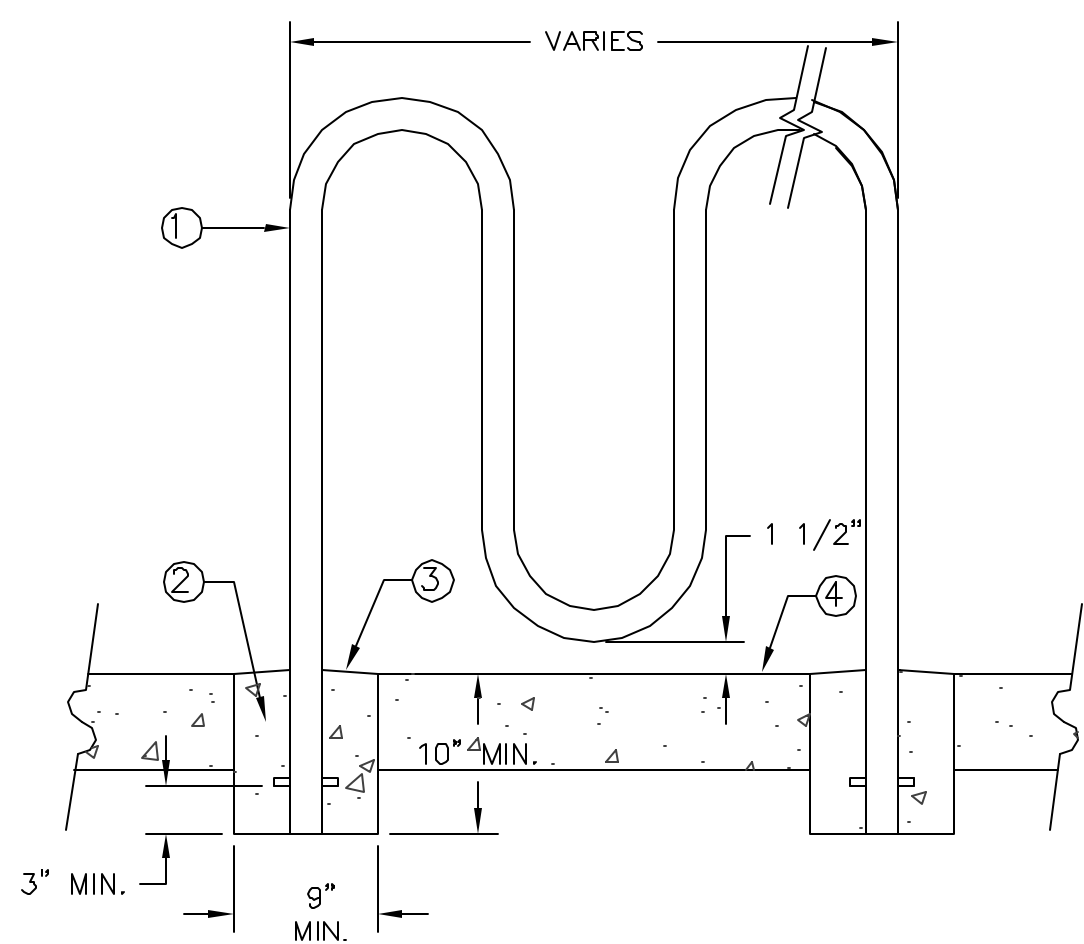


SCALE (FT.)



1	GHG	03/24/06	DFCM REVISIONS
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ODDEN - (801) 889-1662		Chk: GHG	
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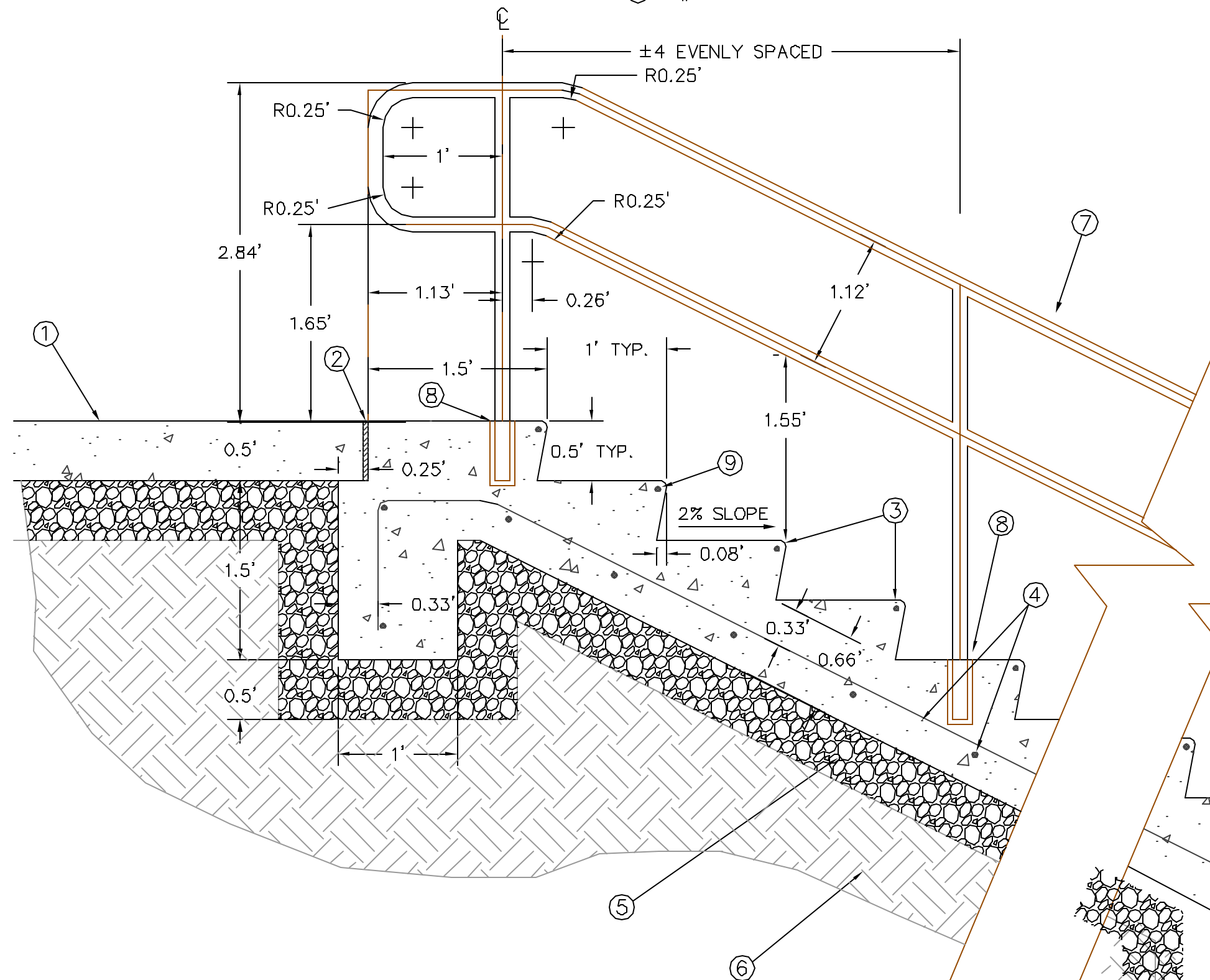


A BIKE RACK INSTALLATION
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- 1 CONCRETE WALK - SEE DETAIL A-9 & C-9
- 2 1/2" FELTEXPANSION JOINT
- 3 CONCRETE STEPS
- 4 #4 REBAR @ 12" O.C. EACH WAY, 3" MIN. DEPTH ADJACENT TO GROUND AND 1" MIN. DEPTH @ SURFACE OF STEPS.

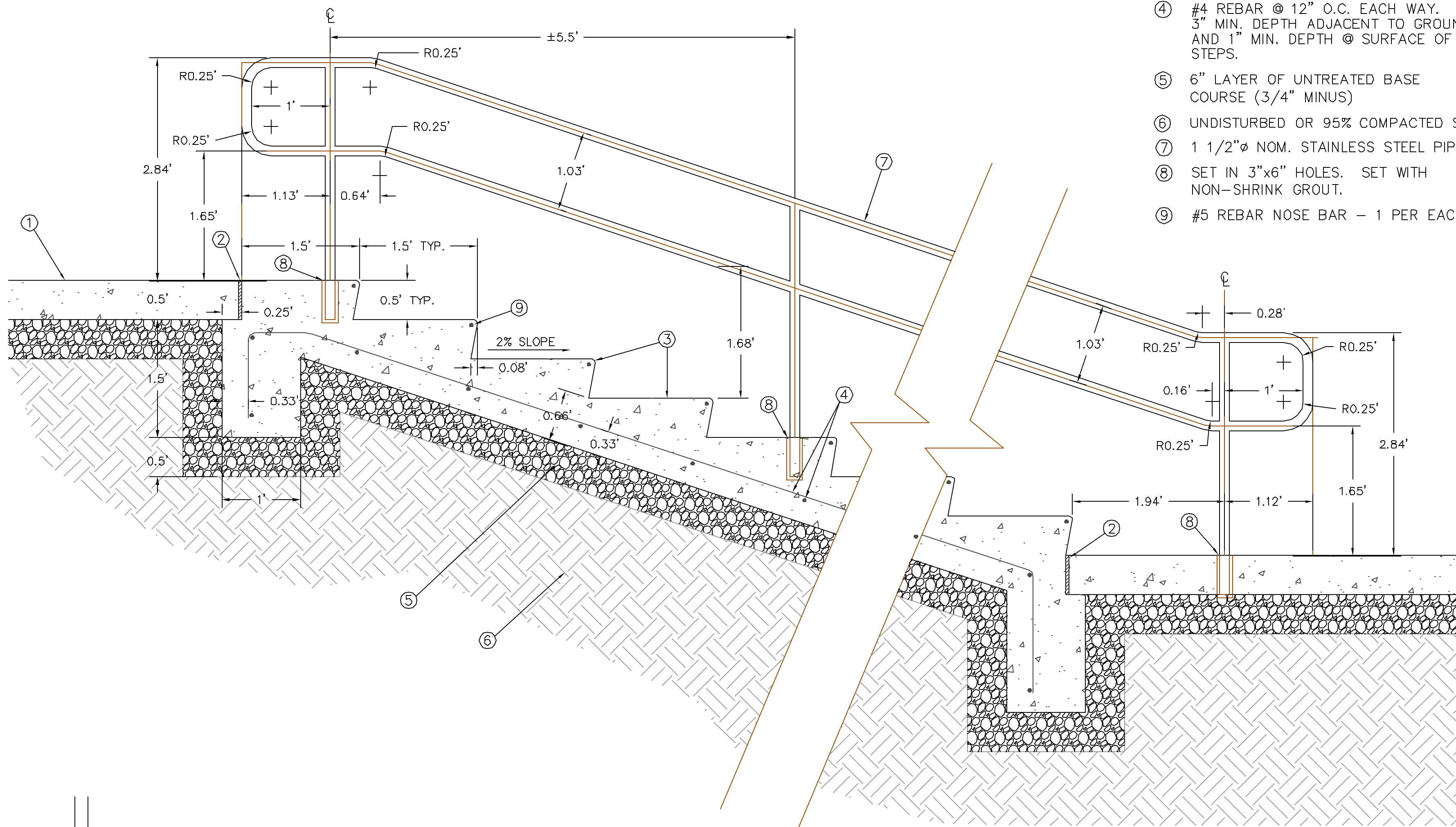
- 1 "M" STYLE OR ROLLER COASTER BIKE RACK - Patterson-Williams MODEL1602-09 (FINISH) KELLY GREEN POWDER COAT
- 2 CORE DRILL 9" MIN. DIAMETER HOLE IN CONCRETE PAVEMENT. EXCAVATE A 10" DEEP HOLE. PLACE CONCRETE IN HOLES AND PLACE RACK, PUSHING OUT EXCESS WET CONCRETE.
- 3 TROWEL THE EXCESS CONCRETE SMOOTH AROUND THE BIKE RACK LEG AND SLOPE THE SURFACE TO DRAIN AWAY FROM BIKE RACK LEG.
- 4 CONCRETE PAVEMENT

- 5 6" LAYER OF UNTREATED BASE COURSE (3/4" MINUS)
- 6 UNDISTURBED OR 95% COMPACTED SUBGRADE
- 7 1 1/2" NOM. STAINLESS STEEL PIPE RAILING
- 8 SET IN 3"x6" HOLES. SET WITH NON-SHRINK GROUT.
- 9 #5 REBAR NOSE BAR - 1 PER EACH TREAD



B 12" CONCRETE STEPS AND HANDRAIL
NTS COPYRIGHT (c) 2005 by Bingham Engineering

NOTE: DETAIL SHOWN WITH HANDRAIL PERPENDICULAR TO STAIR TREADS. AT LOCATIONS WHERE HANDRAILS ANGLED, CONTRACTOR SHALL MAKE ADJUSTMENTS TO HANDRAIL KEEPING FINISH HEIGHT, MID RAIL LOCATION AND OVERHANG AT TOP AND BOTTOM OF STAIRS CONSISTENT WITH DETAIL.

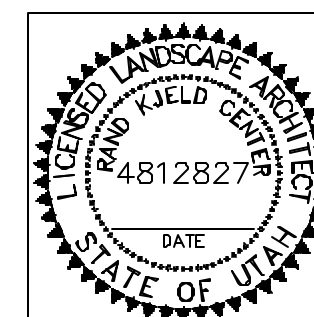


B 18" CONCRETE STEPS AND HANDRAIL
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NOTE: DETAIL SHOWN WITH HANDRAIL PERPENDICULAR TO STAIR TREADS. AT LOCATIONS WHERE HANDRAILS ANGLED, CONTRACTOR SHALL MAKE ADJUSTMENTS TO HANDRAIL KEEPING FINISH HEIGHT, MID RAIL LOCATION AND OVERHANG AT TOP AND BOTTOM OF STAIRS CONSISTENT WITH DETAIL.

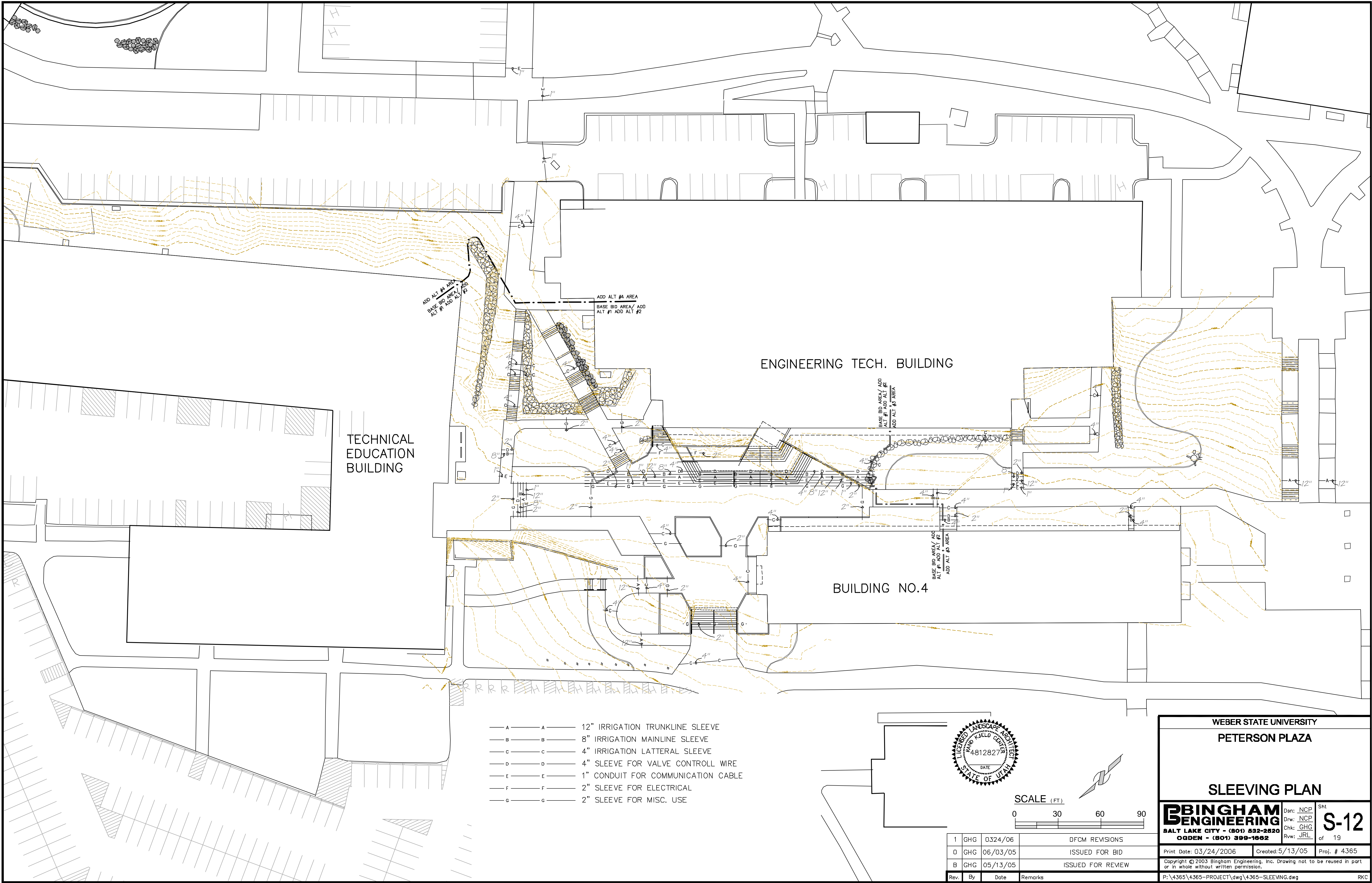
GENERAL NOTE: CONTRACTOR SHALL INSURE THAT HE IS FAMILIAR AND COMPLIES WITH THE CONSTRUCTION STANDARDS FOR ARCHITECTS, ENGINEERS, & CONTRACTORS ESTABLISHED BY WEBER STATE UNIVERSITY FACILITIES MANAGEMENT. IN ANY CIRCUMSTANCES WHERE THERE IS A CONFLICT BETWEEN THE SPECIFICATIONS PROVIDED IN THESE CONSTRUCTION DOCUMENTS AND THE WSU STANDARDS, THE WSU STANDARDS SHALL TAKE PRECEDENCE. THIS PARTICULARLY APPLIES TO CONCRETE.

ALL CONCRETE (OTHER THAN COLORED STAMPED CONCRETE) SHALL CONTAIN FIBER MESH REINFORCING PER WSU STANDARD.

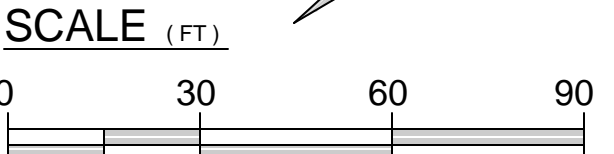
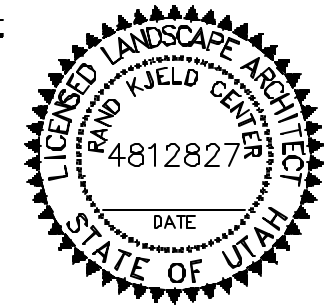


1	GHG	03/24/06	DFCM REVISIONS
0	GHG	06/03/05	ISSUED FOR BID
B	GHG	05/13/05	ISSUED FOR REVIEW
A	GHG	04/19/05	ISSUED FOR REVIEW
Rev.	By	Date	Remarks

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B BINGHAM ENGINEERING		Dsn: RKC	Sht S-11
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- A — 12" IRRIGATION TRUNKLINE SLEEVE
- B — 8" IRRIGATION MAINLINE SLEEVE
- C — 4" IRRIGATION LATTERAL SLEEVE
- D — 4" SLEEVE FOR VALVE CONTROLL WIRE
- E — 1" CONDUIT FOR COMMUNICATION CABLE
- F — 2" SLEEVE FOR ELECTRICAL
- G — 2" SLEEVE FOR MISC. USE



1	GHG	0324/06	DFCM REVISIONS
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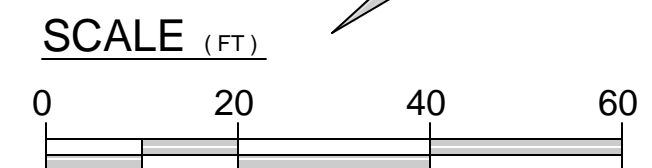
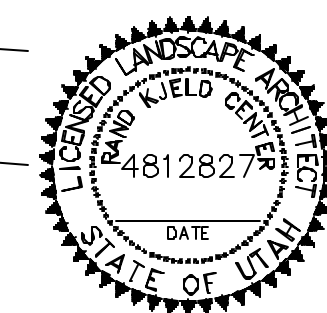
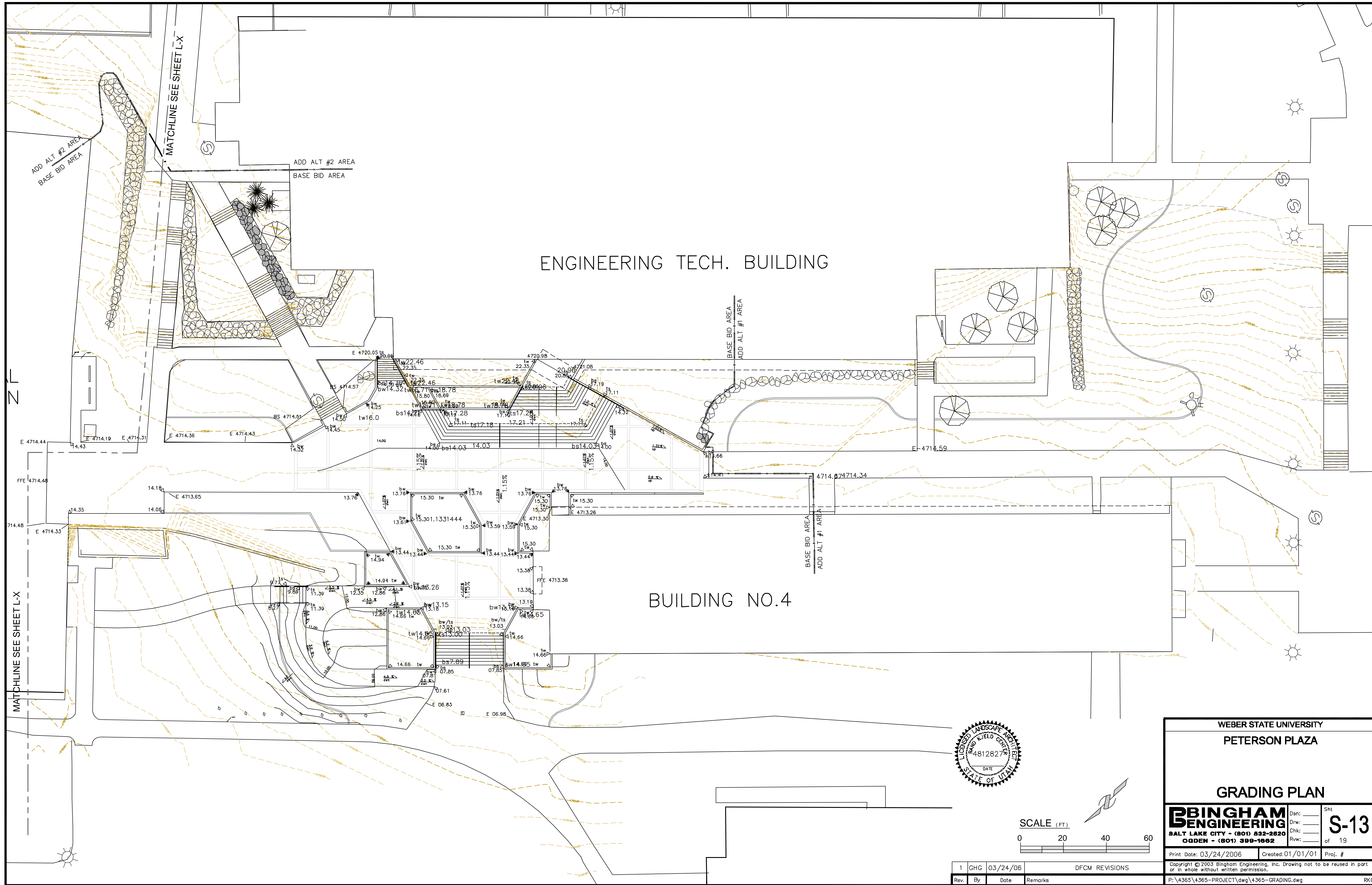
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of 19

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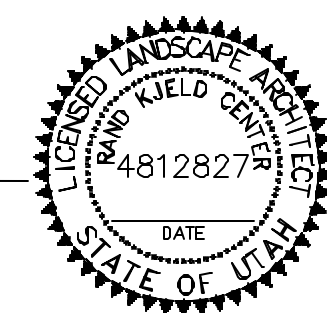
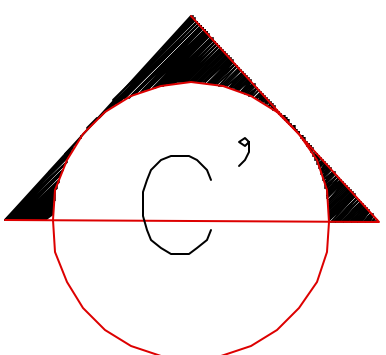
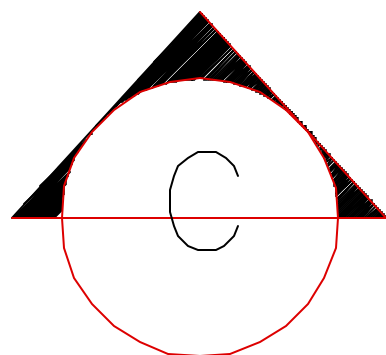
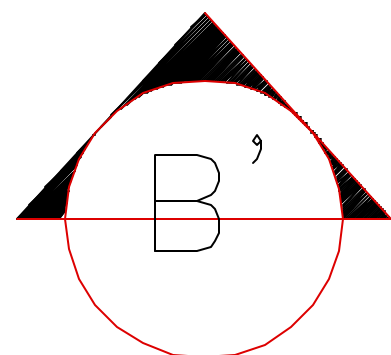
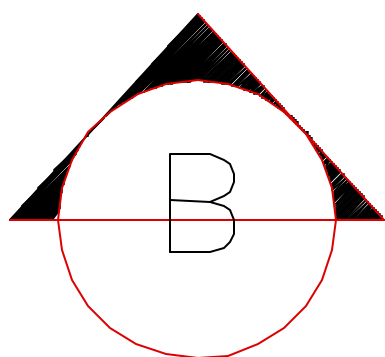
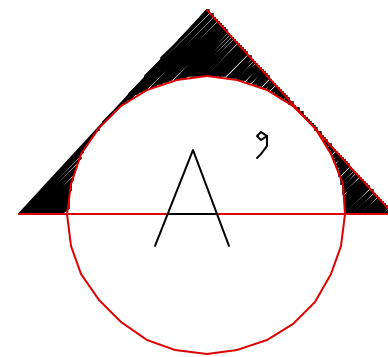
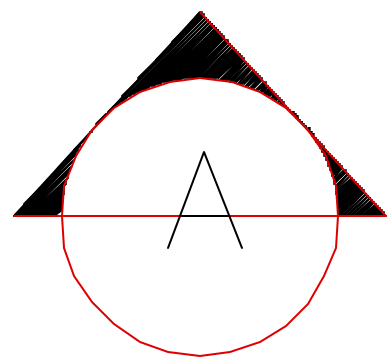
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RKC

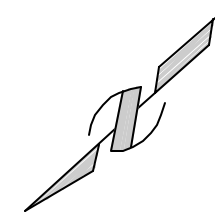


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RKC			

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BLOCK WALL SECTIONS

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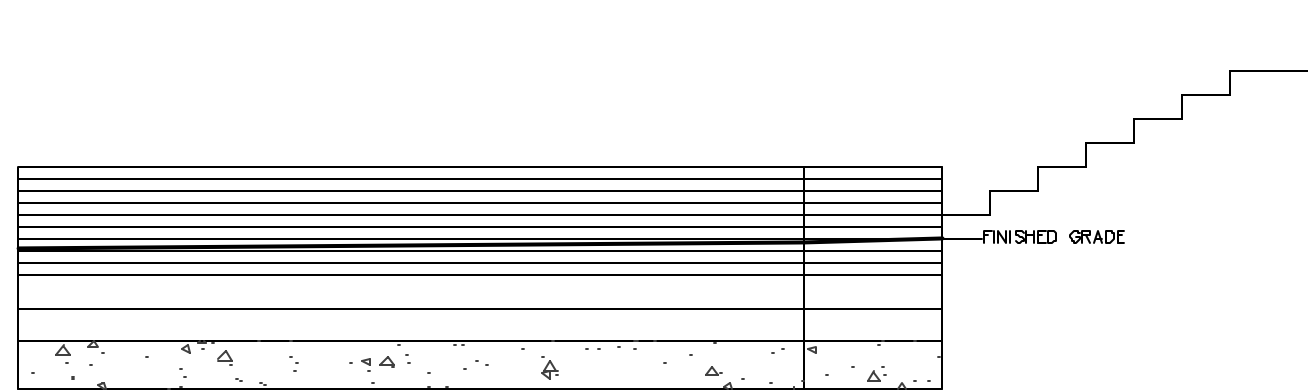
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Sht. **S-14**
of 19

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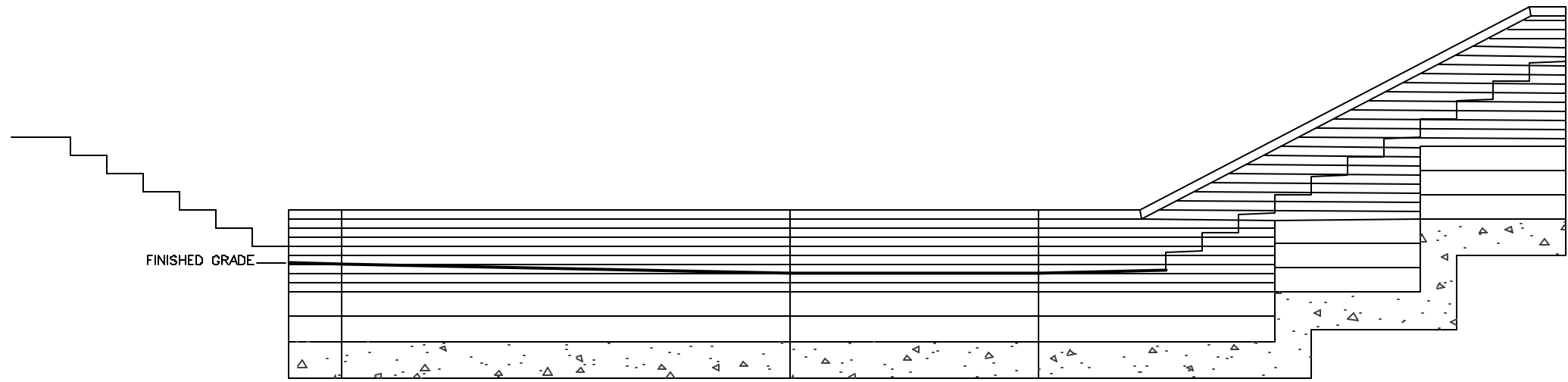
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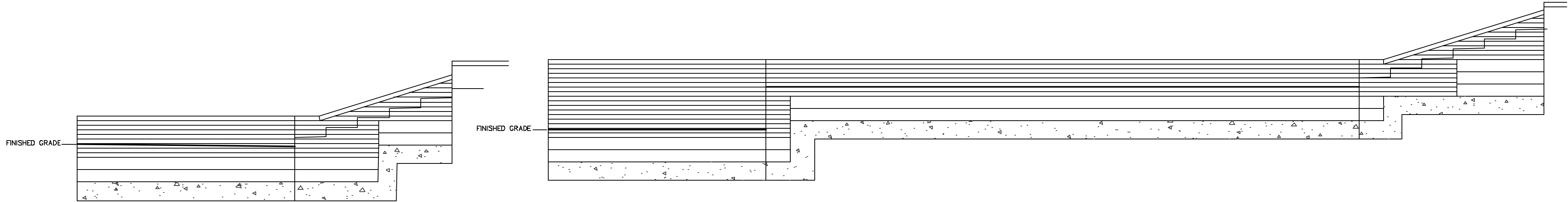
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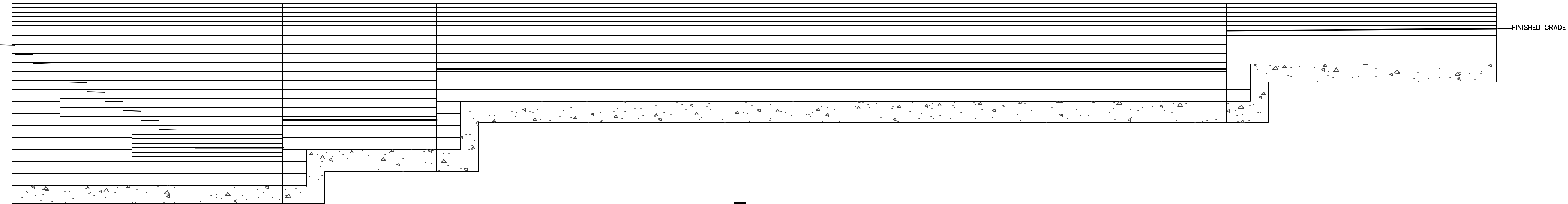
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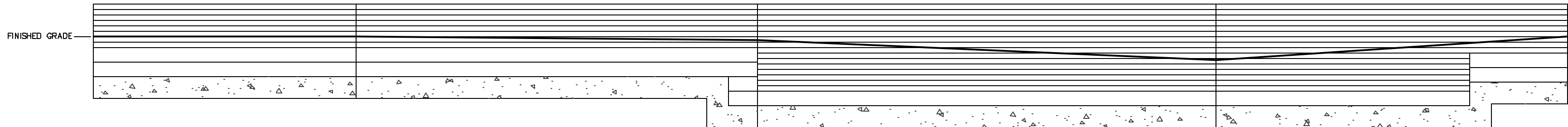
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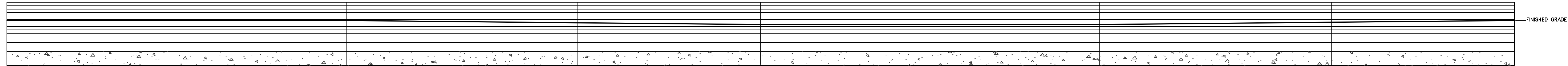
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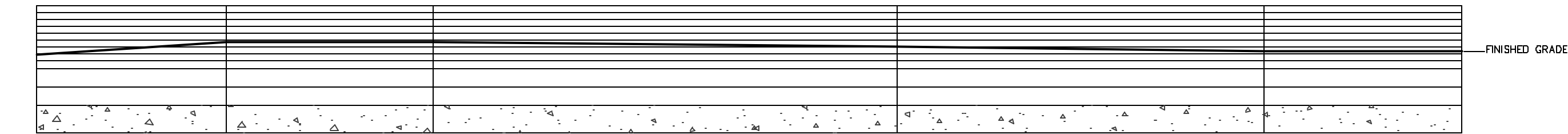
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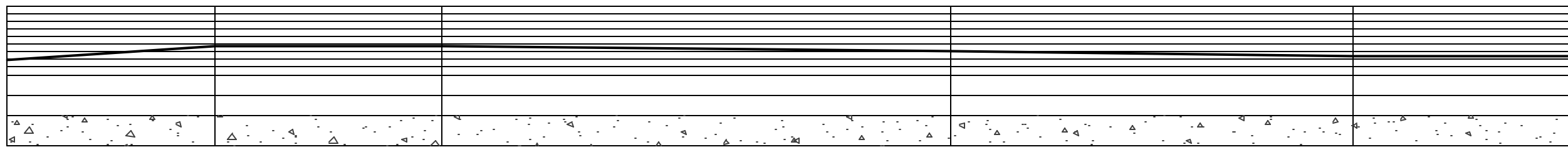
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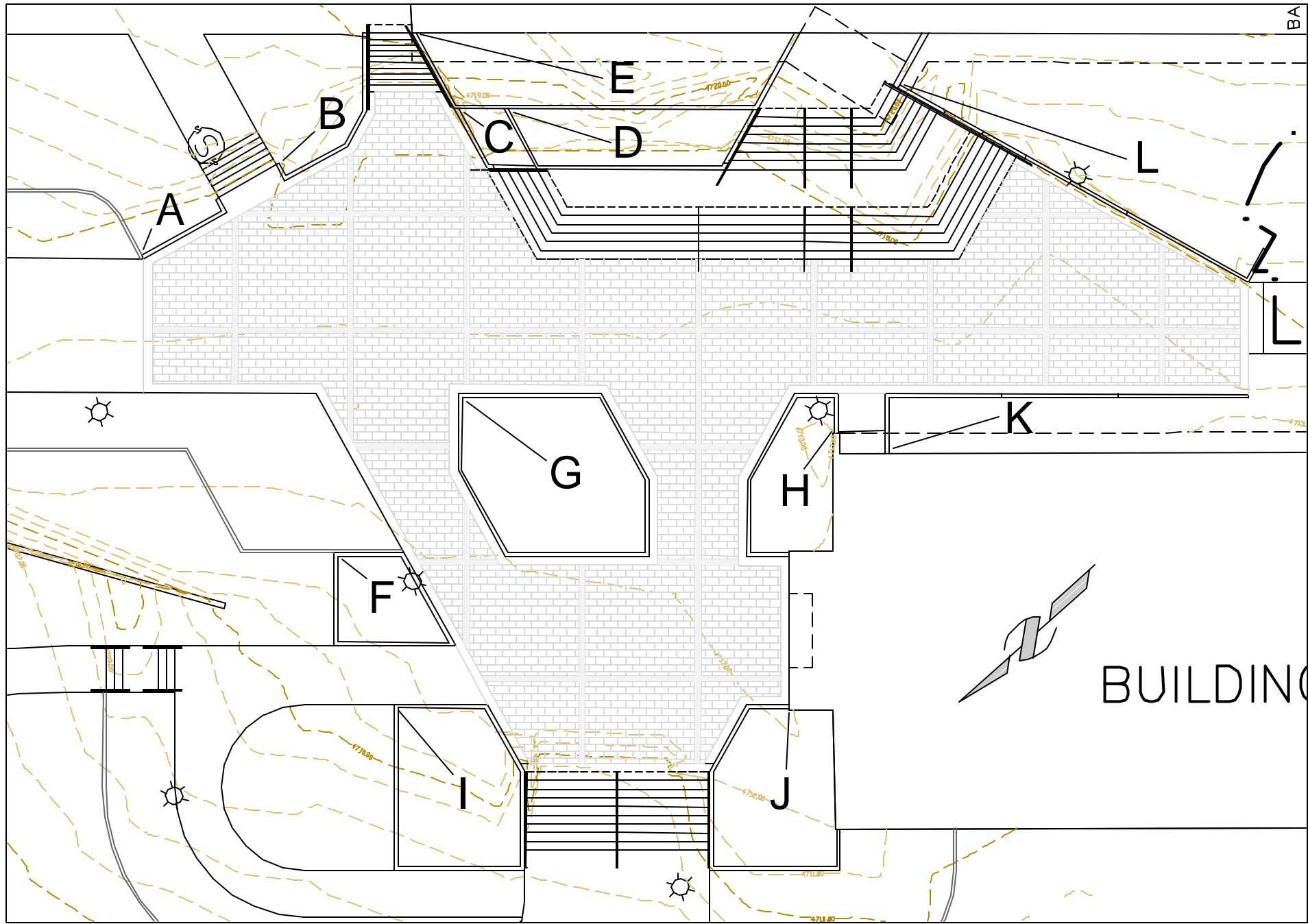
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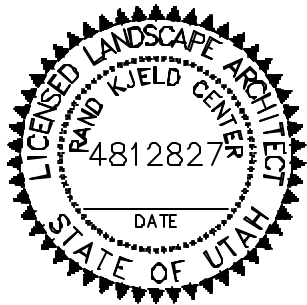
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NOTE: THESE FOUNDATION STEPS SHALL BE CONSIDERED BY THE CONTRACTOR TO BE SCHEMATIC IN NATURE, AND MAY REQUIRE ADJUSTMENTS DURING INSTALLATION IN THE FIELD. THE CONTRACTOR MAY MAKE CHANGES THAT MORE CLOSELY FOLLOW BEST PROFESSIONAL STANDARDS TO ACCOMPLISH THE DESIGN INTENT OF THESE DRAWINGS. THE STEPPING OF FOOTINGS AND WALL HEIGHTS IS INTENDED TO REDUCE THE AMOUNT OF WALL TO BE BUILT, AND PROVIDE THE MOST EFFICIENT CONSTRUCTION POSSIBLE.

SEE CONSTRUCTION DETAIL FOR EXACT WALL CONSTRUCTION.

NO STANDARD CMU BLOCK SHALL BE VISIBLE ABOVE FINISHED GRADE. ALL COURSES SHALL BE INSTALLED LEVEL.



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ATLAS BLOCK WALLS
PROPOSED ELEVATIONS

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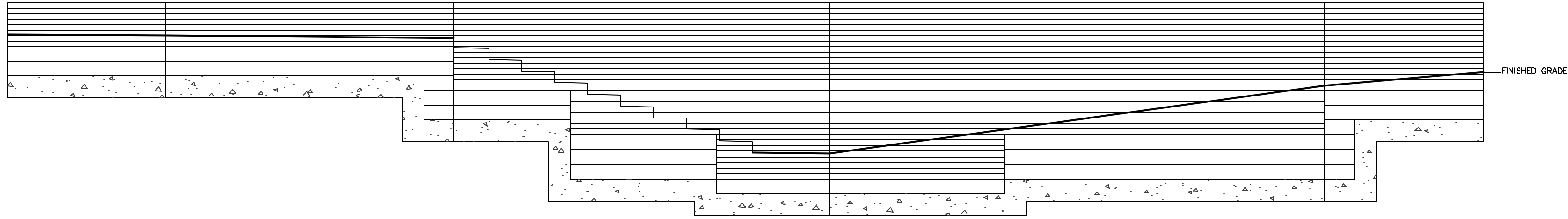
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Rvw: RW

Sht
S-15
of 19

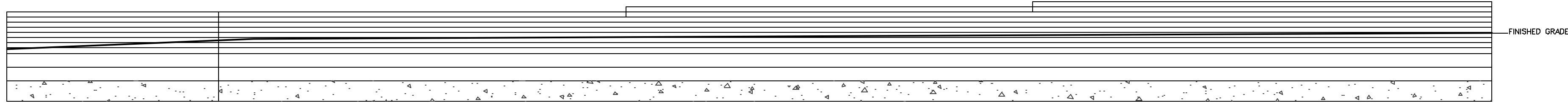
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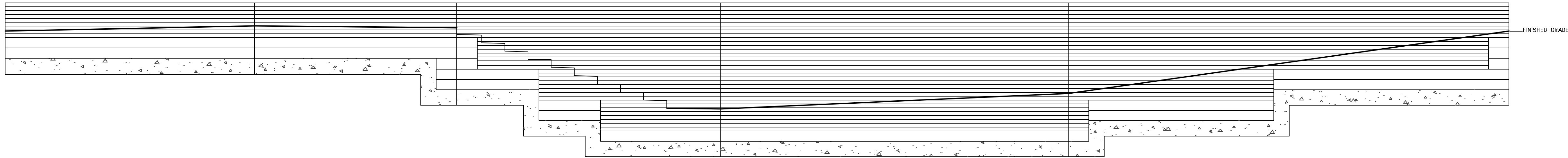
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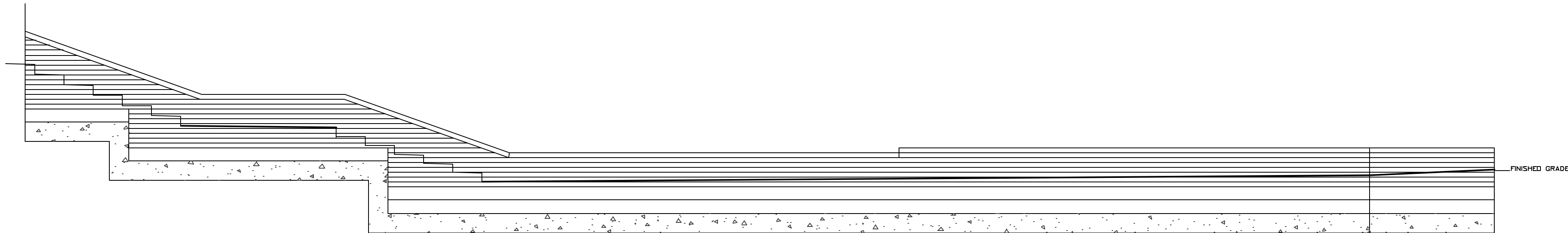
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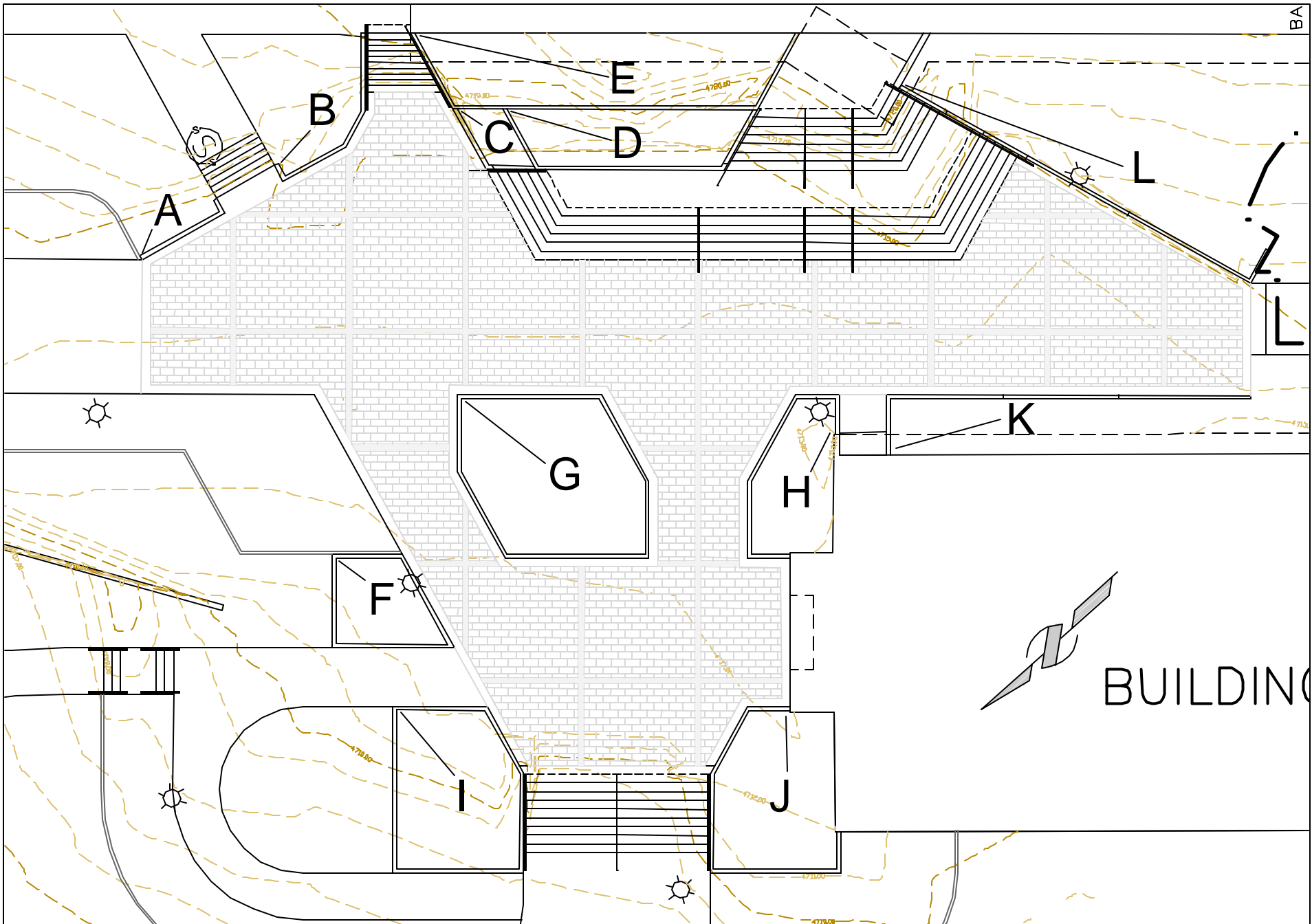
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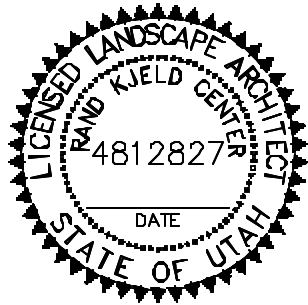
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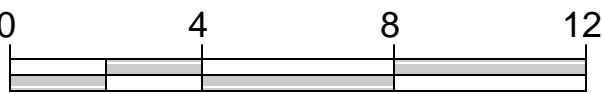
NOTE: THESE FOUNDATION STEPS SHALL BE CONSIDERED BY THE CONTRACTOR TO BE SCHEMATIC IN NATURE, AND MAY REQUIRE ADJUSTMENTS DURING INSTALLATION IN THE FIELD. THE CONTRACTOR MAY MAKE CHANGES THAT MORE CLOSELY FOLLOW BEST PROFESSIONAL STANDARDS TO ACCOMPLISH THE DESIGN INTENT OF THESE DRAWINGS. THE STEPPING OF FOOTINGS AND WALL HEIGHTS IS INTENDED TO REDUCE THE AMOUNT OF WALL TO BE BUILT, AND PROVIDE THE MOST EFFICIENT CONSTRUCTION POSSIBLE.

SEE CONSTRUCTION DETAIL FOR EXACT WALL CONSTRUCTION.

NO STANDARD CMU BLOCK SHALL BE VISIBLE ABOVE FINISHED GRADE. ALL COURSES SHALL BE INSTALLED LEVEL.



SCALE (FT)



1	GHG	03/24/06	DFCM REVISIONS
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ATLAS BLOCK WALLS
PROPOSED ELEVATIONS

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Dsn: GHG
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S-16
of 19

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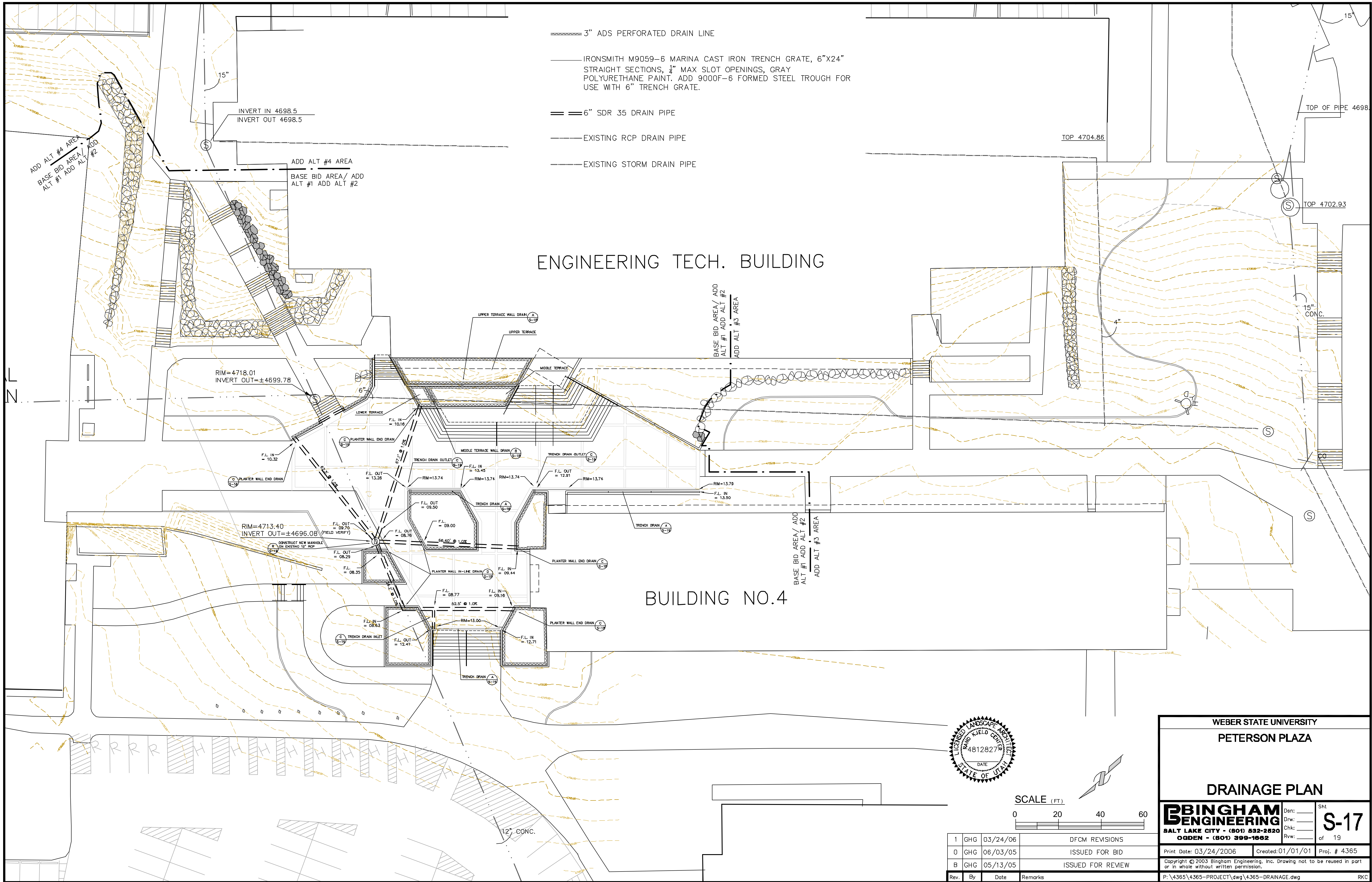
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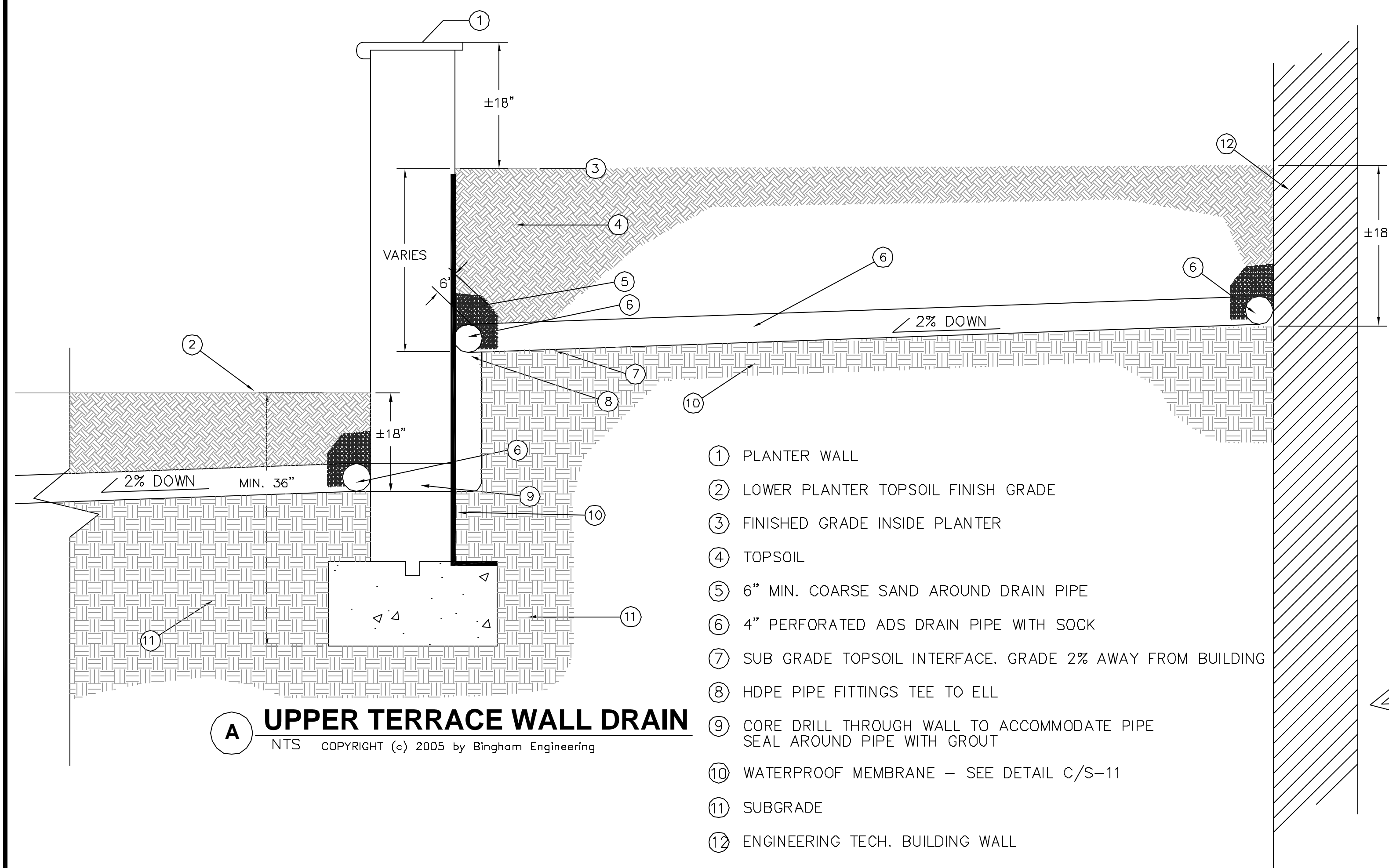
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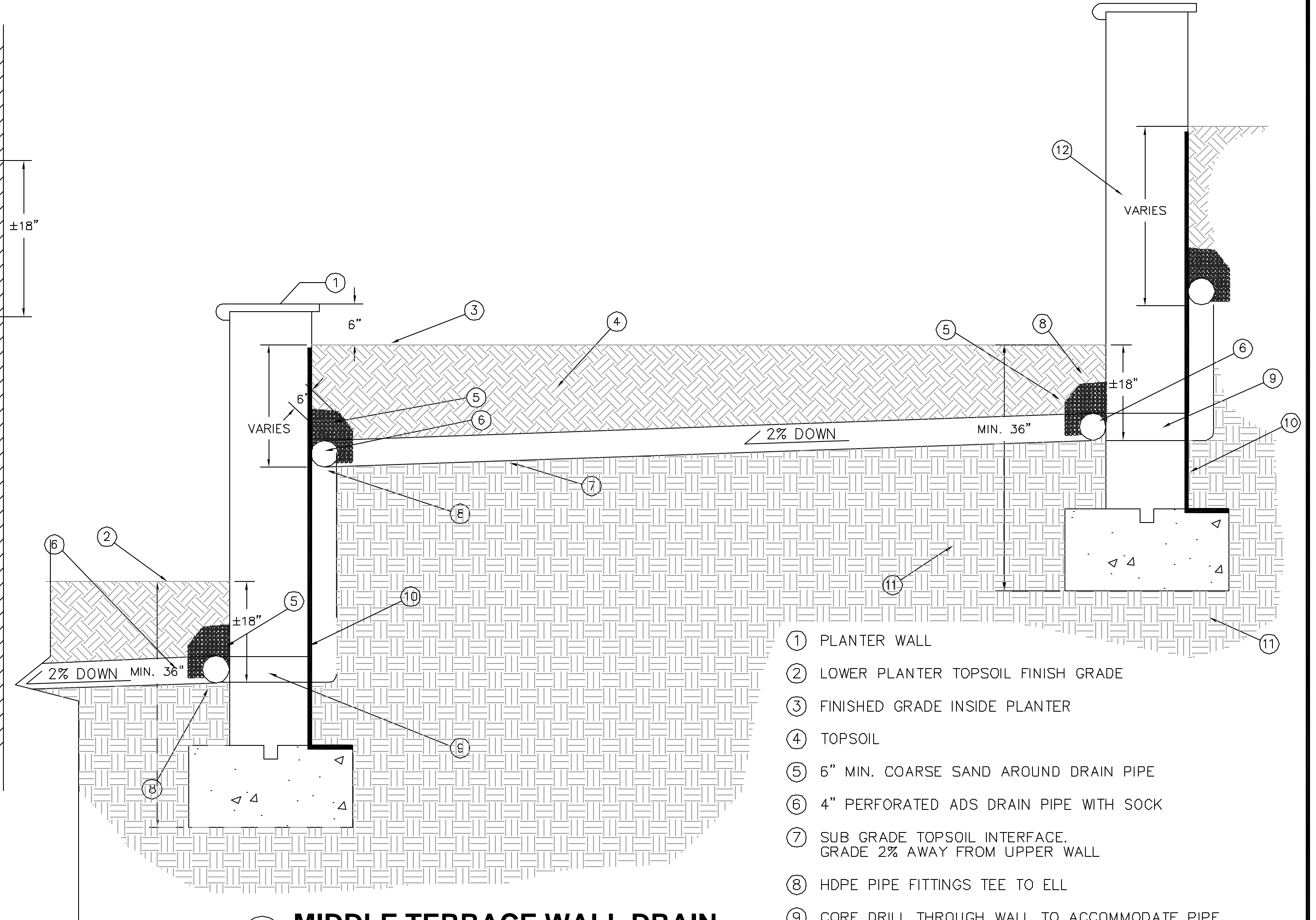
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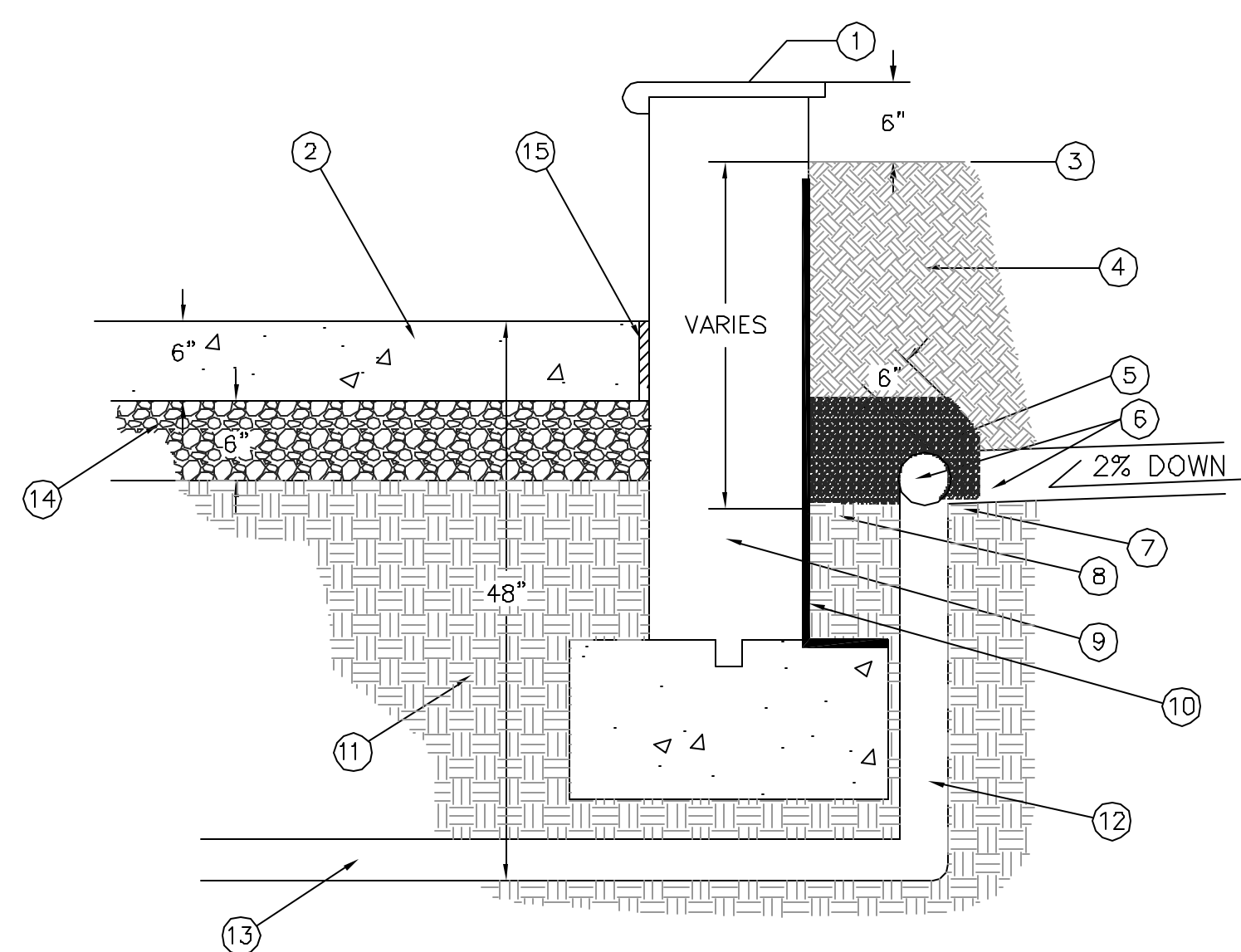
A UPPER TERRACE WALL DRAIN
NTS COPYRIGHT (c) 2005 by Bingham Engineering

- ① PLANTER WALL
- ② LOWER PLANTER TOPSOIL FINISH GRADE
- ③ FINISHED GRADE INSIDE PLANTER
- ④ TOPSOIL
- ⑤ 6" MIN. COARSE SAND AROUND DRAIN PIPE
- ⑥ 4" PERFORATED ADS DRAIN PIPE WITH SOCK
- ⑦ SUB GRADE TOPSOIL INTERFACE. GRADE 2% AWAY FROM BUILDING
- ⑧ HDPE PIPE FITTINGS TEE TO ELL
- ⑨ CORE DRILL THROUGH WALL TO ACCOMMODATE PIPE SEAL AROUND PIPE WITH GROUT
- ⑩ WATERPROOF MEMBRANE - SEE DETAIL C/S-11
- ⑪ SUBGRADE
- ⑫ ENGINEERING TECH. BUILDING WALL



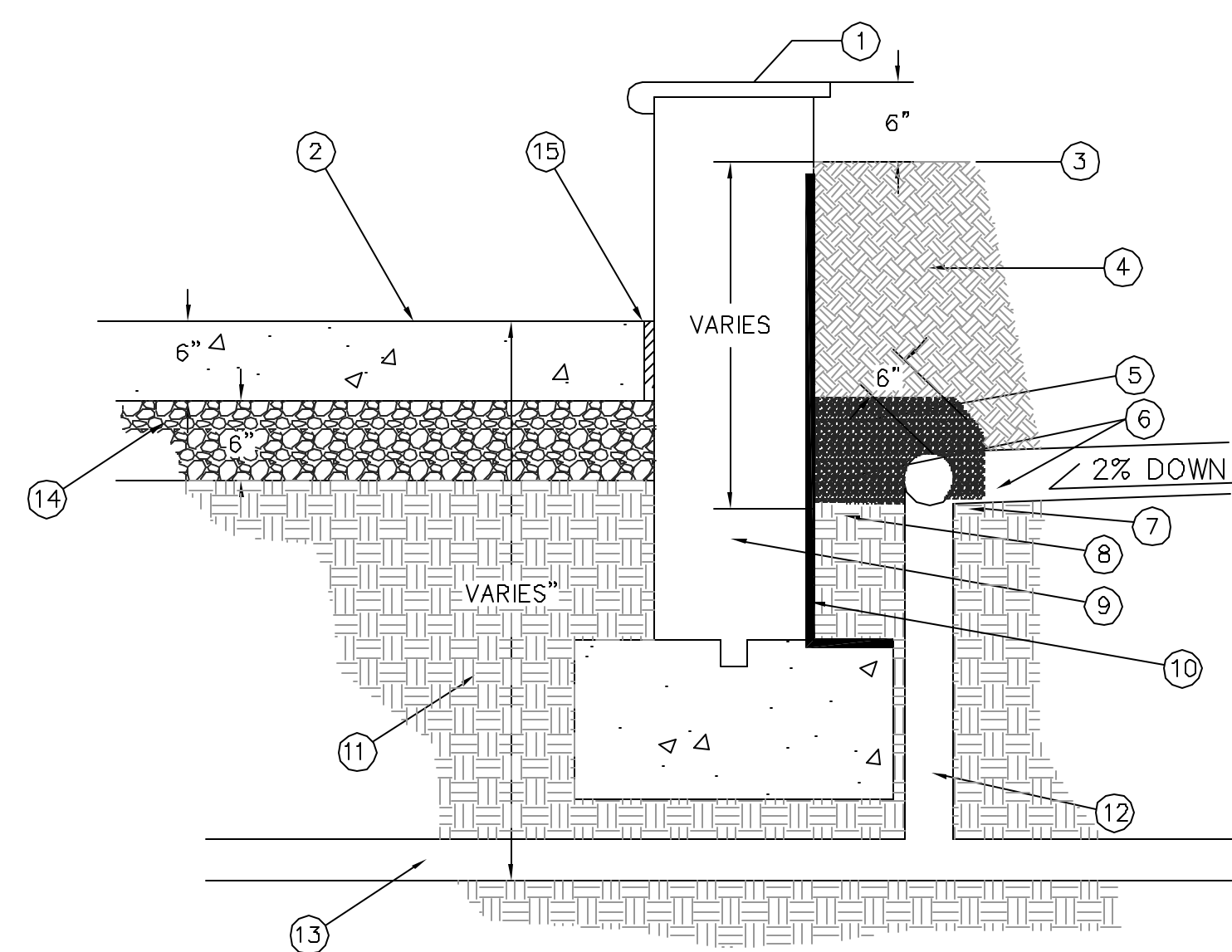
B MIDDLE TERRACE WALL DRAIN
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- ① PLANTER WALL
- ② LOWER PLANTER TOPSOIL FINISH GRADE
- ③ FINISHED GRADE INSIDE PLANTER
- ④ TOPSOIL
- ⑤ 6" MIN. COARSE SAND AROUND DRAIN PIPE
- ⑥ 4" PERFORATED ADS DRAIN PIPE WITH SOCK
- ⑦ SUB GRADE TOPSOIL INTERFACE. GRADE 2% AWAY FROM UPPER WALL
- ⑧ HDPE PIPE FITTINGS TEE TO ELL
- ⑨ CORE DRILL THROUGH WALL TO ACCOMMODATE PIPE SEAL AROUND PIPE WITH GROUT
- ⑩ WATERPROOF MEMBRANE - SEE DETAIL C/S-11
- ⑪ SUBGRADE
- ⑫ UPPER PLANTER WALL



C PLANTER WALL END DRAIN
NTS COPYRIGHT (c) 2005 by Bingham Engineering

- ① PLANTER WALL
- ② PLAZA PAVING
- ③ FINISHED GRADE INSIDE PLANTER
- ④ TOPSOIL
- ⑤ 6" MIN. COARSE SAND AROUND DRAIN PIPE
- ⑥ 4" PERFORATED ADS DRAIN PIPE WITH SOCK
- ⑦ SUB GRADE TOPSOIL INTERFACE. GRADE 2% AWAY FROM MIDDLE WALL
- ⑧ HDPE PIPE FITTINGS TEE TO ELL
- ⑨ CORE DRILL THROUGH WALL TO ACCOMMODATE PIPE SEAL AROUND PIPE WITH GROUT
- ⑩ WATERPROOF MEMBRANE - SEE DETAIL C/S-11
- ⑪ SUBGRADE
- ⑫ 4" SDR DRAIN PIPE TO 6"
- ⑬ 6" SDR DRAIN PIPE (SEE S-16 FOR SLOPE)
- ⑭ 6" UNTREATED BASE COARSE (3/4" MINUS)
- ⑮ 1/2" FELT EXPANSION JOINT

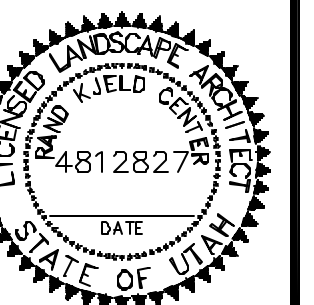


D PLANTER WALL IN LINE DRAIN
NTS COPYRIGHT (c) 2005 by Bingham Engineering

- ① PLANTER WALL
- ② PAVING OR FINISH GRADE
- ③ FINISHED GRADE INSIDE PLANTER
- ④ TOPSOIL
- ⑤ 6" MIN. COARSE SAND AROUND DRAIN PIPE
- ⑥ 4" PERFORATED ADS DRAIN PIPE WITH SOCK
- ⑦ SUB GRADE TOPSOIL INTERFACE. GRADE 2% TOWARD DRAIN
- ⑧ HDPE PIPE FITTINGS TEE TO ELL
- ⑨ CORE DRILL THROUGH WALL TO ACCOMMODATE PIPE SEAL AROUND PIPE WITH GROUT
- ⑩ WATERPROOF MEMBRANE - SEE DETAIL C/S-11
- ⑪ SUBGRADE
- ⑫ 4" SDR DRAIN PIPE TO 6"
- ⑬ 6" SDR DRAIN PIPE (SEE PLANS FOR SLOPE)
- ⑭ 6" UNTREATED BASE COARSE (3/4" MINUS) WHERE APPLICABLE
- ⑮ 1/2" FELT EXPANSION JOINT

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- ①

GRATE—MARINA PATTERN # 9059—6 WITH 34"—3" INSIDE RADIUS, AS MANUFACTURED BY IRONSMITH, PALM DESERT, CA.
- ②

1/4" X 1/2" X 1" GRINDING PADS FOR FINAL LEVELING
- ③

TEMPORARY SPREADERS SPOT WELDED TO TROUGH REMOVE AFTER CONCRETE SETS
- ④

FORMED STEEL TROUGH 16 GAUGE. SET @ 0.75% SLOPE (SEE GRADING PLAN FOR DETAILS).
- ⑤

1/2" X 2" NELSON STUD SHOP WELDED TO FORMS. (24" O.C. typ.)
- ⑥

GRATE FRAME

NOTES:
CLEAR OPENING (D) IS 2" LESS THAN GRATE WIDTH (A)

TROUGH OPENING (B) IS 1/4" GREATER THAN GRATE WIDTH (A)

INSTALL SPREADERS 1/4" LARGER THAN GRATE WIDTH (B) AT 18" MINIMUM CENTERS WHEN POURING CONCRETE TO INSURE PROPER FIT.

DEPTH (E) CAN BE SPECIFIED. (BOTTOM PROFILE OF TROUGH MAY VARY DEPENDING ON DEPTH).

TROUGHS ARE SUPPLIED IN 5' MAXIMUM SECTIONS

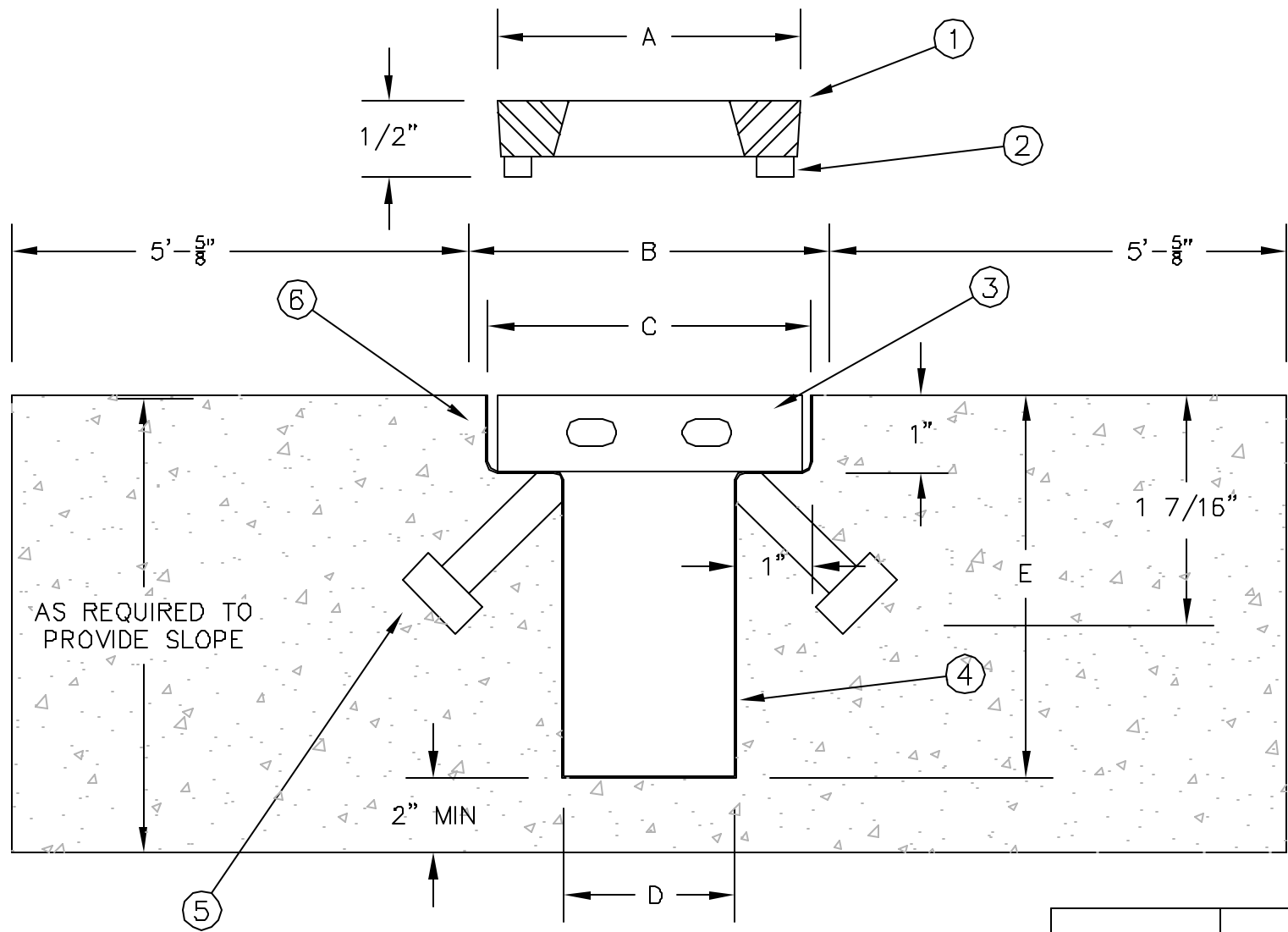
TROUGH AND GRATE SHALL BE PREFORMED WITH GRATE TO HAVE AN INTERIOR RADIUS OF 34"—3"

END CAPS AND PIPE CUTOUTS AVAILABLE ON REQUEST

TROUGHS ARE NOT WATER TIGHT AND ARE DESIGNED TO ASSIST IN CONCRETE FORM UP.

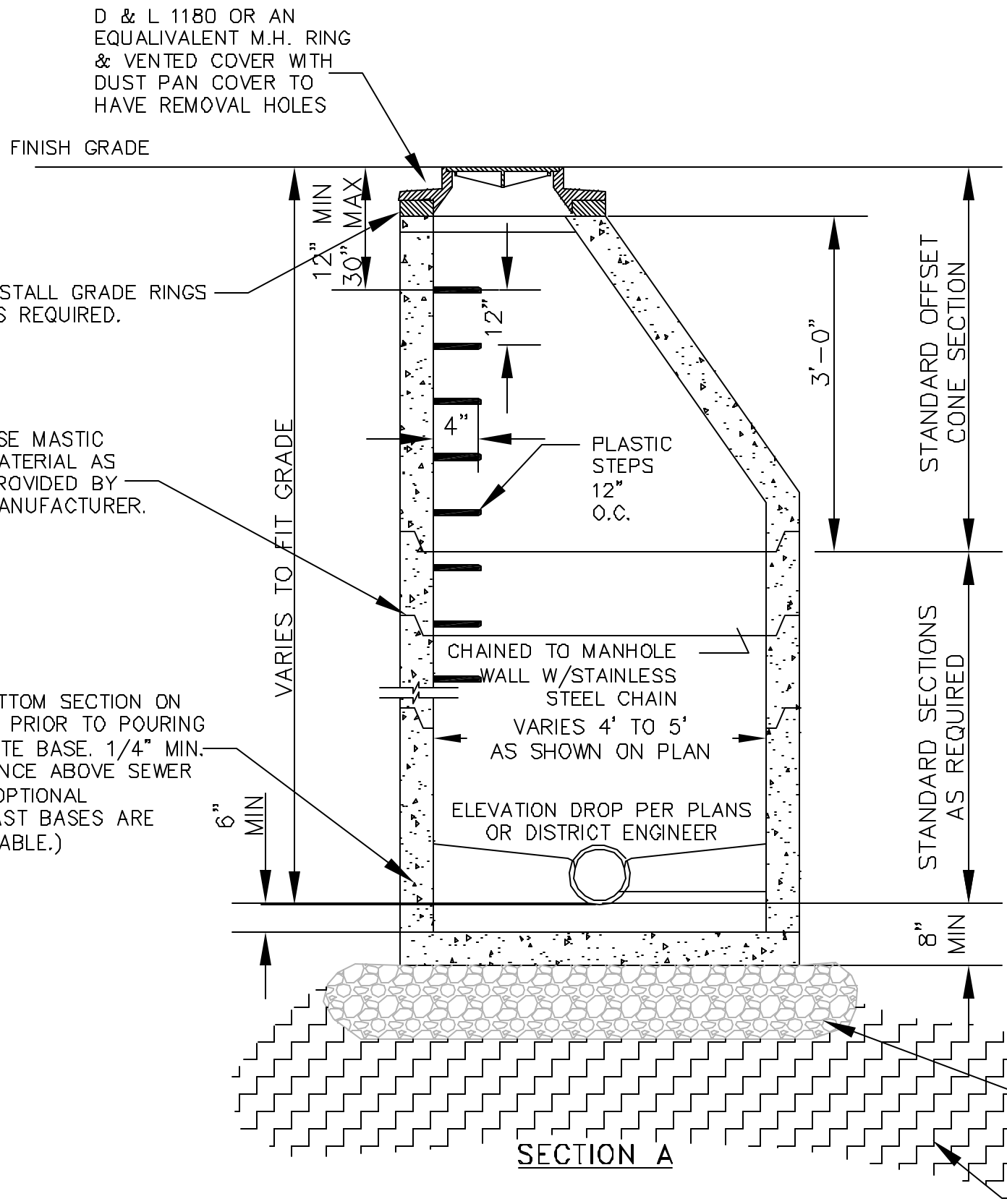
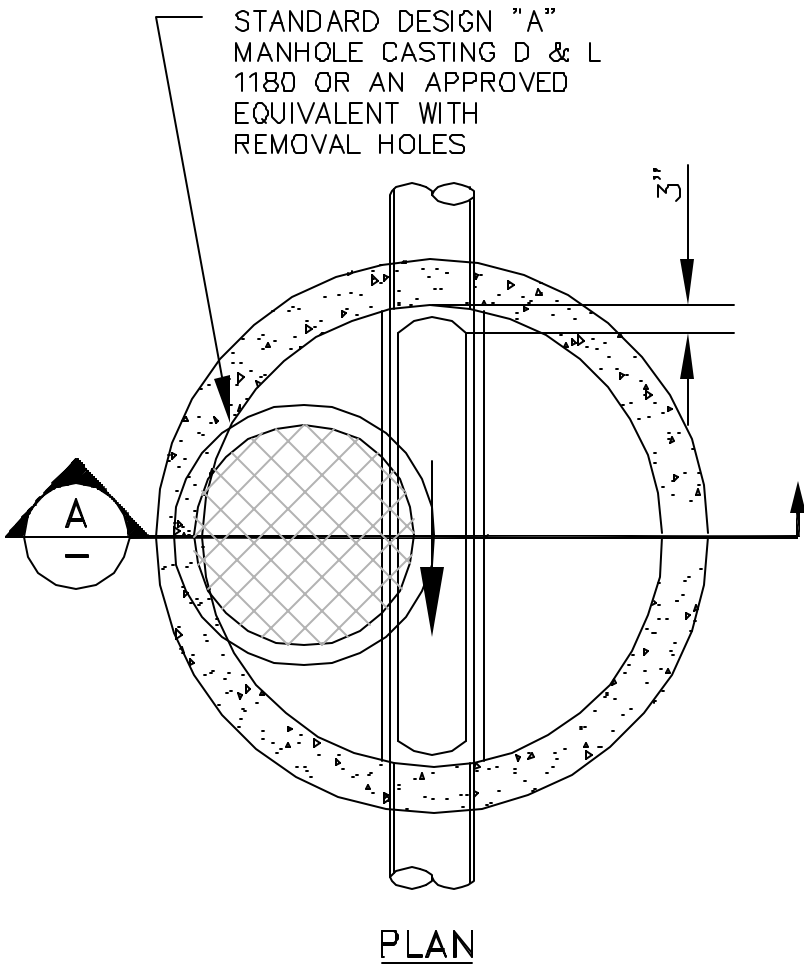
ORDER GRATE, FRAME, AND TROUGH FROM:

IRONSMITH
41—651 Corporate Way #2&3
Palm Desert, CA 92260 (800) 338—4766
(760) 776—5080 Fax



TRENCH DRAIN SECTION

A	B	C	D
6"	6 3/4"	6 1/4"	4 1/4"



NOTES:
FINISH FLOOR WHEN CONC. BASE IS POURED. CUT TOP 1/2 OF PIPE OUT AFTER CONC. HAS SET TO 3" FROM WALLS. GROUT FACE OF CHANNEL TO COVER EDGE OF PIPE.

OUTSIDE DROP MANHOLE

B MANHOLE AND INLETS
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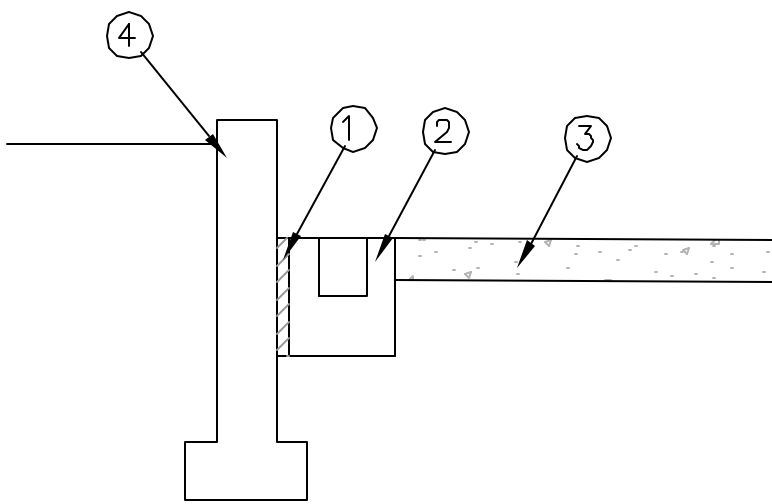
- ①

1/2" FELT EXPANSION JOINT
- ②

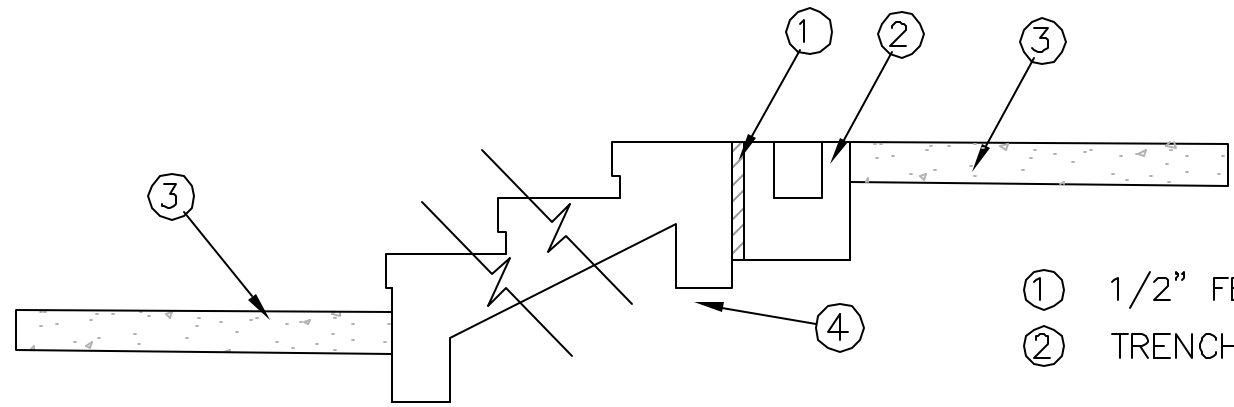
TRENCH DRAIN see detail (A/S18)
- ③

CONCRETE SLAB see detail (B/S9)
- ④

PLANTER WALL see detail (E/S10)



TRENCH DRAIN AT SEAT WALL



TRENCH DRAIN AT STAIRS

- ①

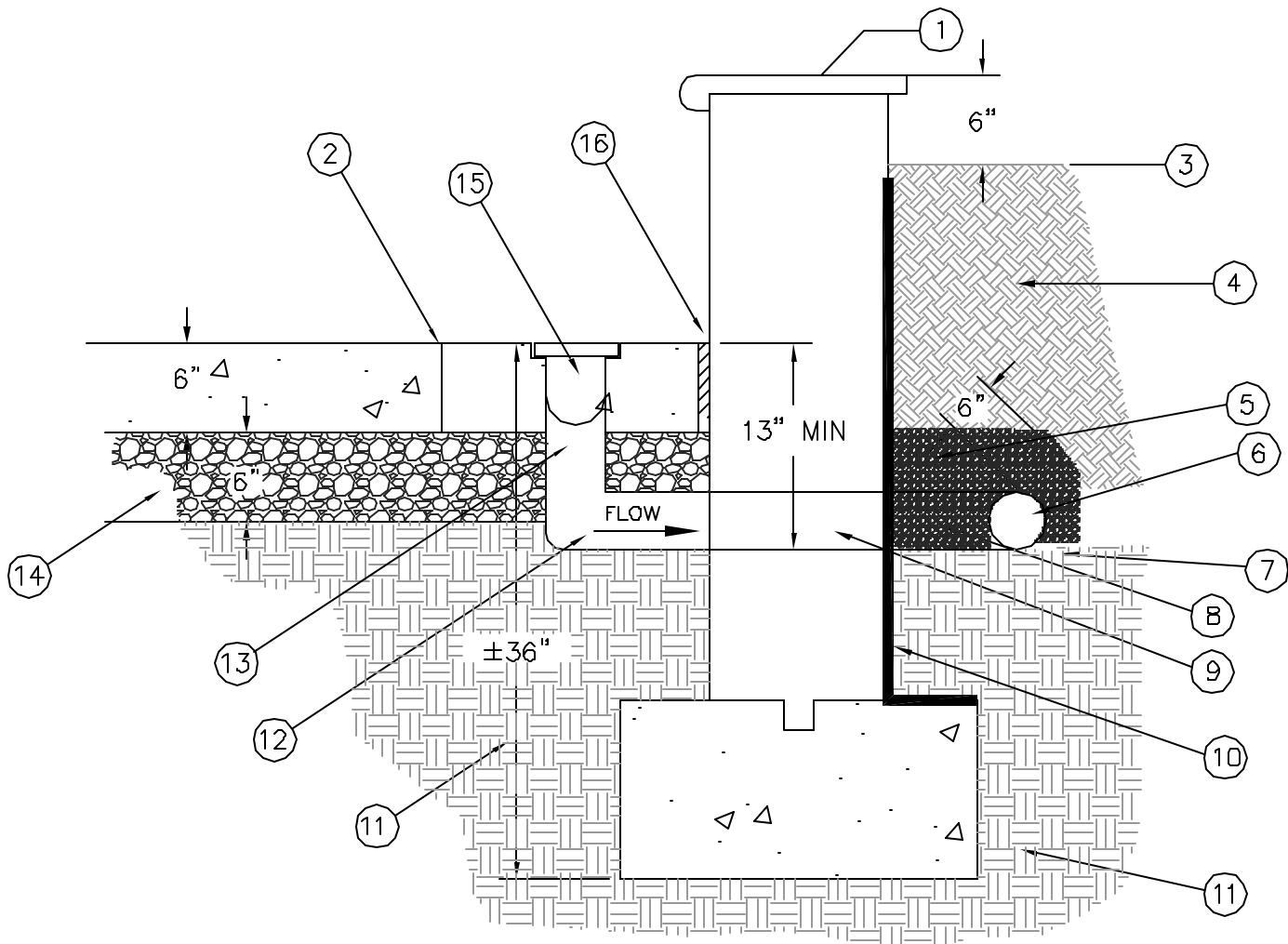
1/2" FELT EXPANSION JOINT
- ②

TRENCH DRAIN see detail (A/S18)
- ③

CONCRETE SLAB see detail (B/S9)
- ④

CONCRETE STAIRS see detail (E/S10)

A TRENCH DRAIN
NTS



C TRENCH DRAIN OUTLET
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- ①

PLANTER WALL
- ②

PAVING
- ③

FINISHED GRADE INSIDE PLANTER
- ④

TOPSOIL
- ⑤

6" MIN. COARSE SAND AROUND DRAIN PIPE
- ⑥

4" PERFORATED ADS DRAIN PIPE WITH SOCK
- ⑦

SUB GRADE TOPSOIL INTERFACE. GRADE 2% TOWARD DRAIN
- ⑧

PIPE FITTINGS HDPE TEE TO SDR 35 PVC
- ⑨

CORE DRILL THROUGH WALL TO ACCOMMODATE PIPE SEAL AROUND PIPE WITH GROUT
- ⑩

WATERPROOF MEMBRANE — SEE DETAIL C/S—11
- ⑪

SUBGRADE
- ⑫

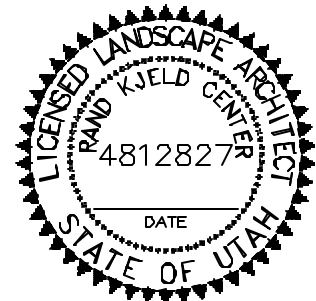
4" SDR DRAIN AND FITTINGS
- ⑬

4" PVC OUTLET
- ⑭

6" UNTREATED BASE COURSE (3/4" MINUS)
- ⑮

TRENCH DRAIN see detail
- ⑯

1/2" FELT EXPANSION JOINT



1	GHG	03/24/06	DFCM REVISIONS
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Chk: _____

Rvw: _____

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of 19

Print Date: 03/24/2006

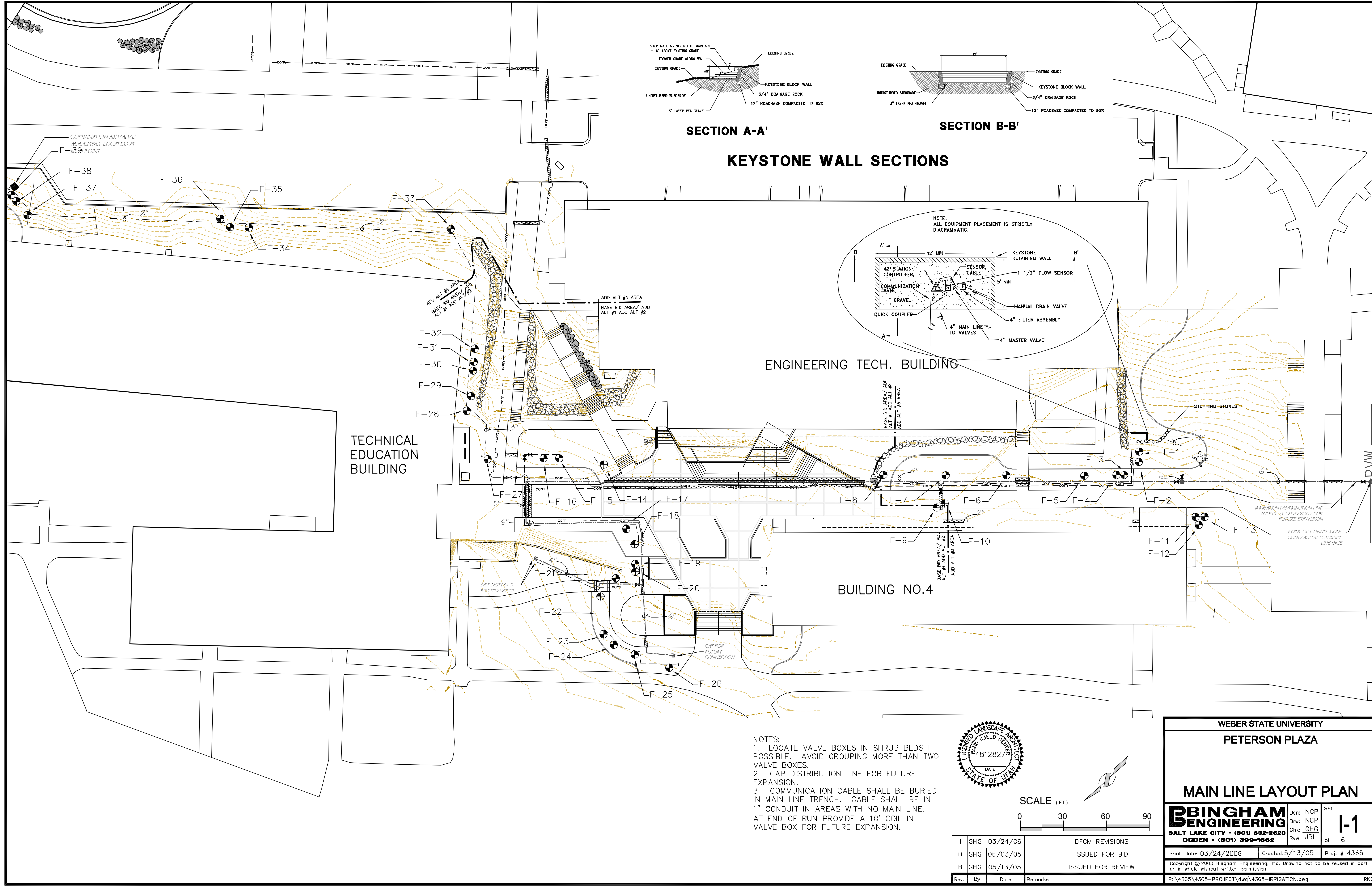
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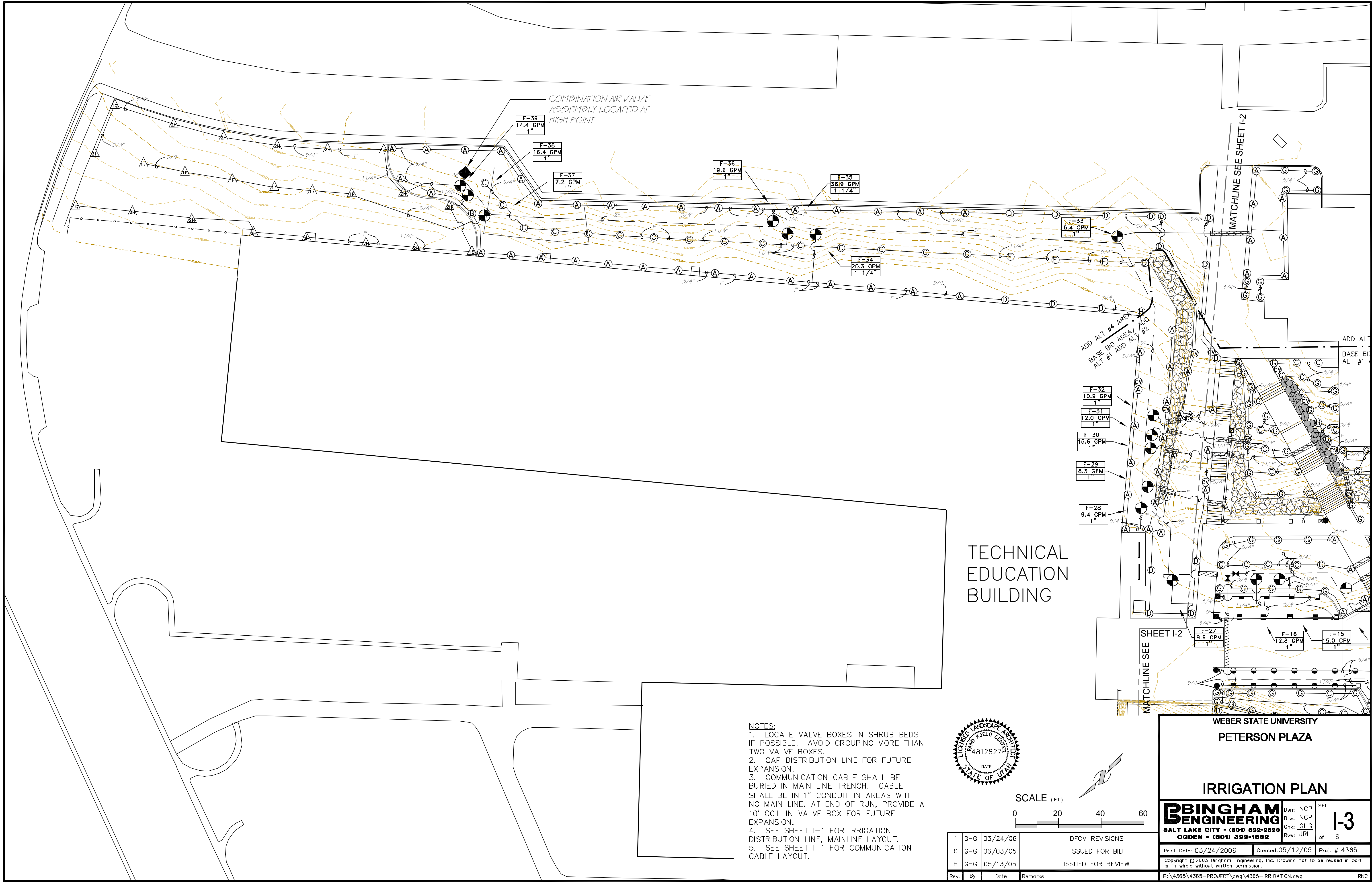
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RKC





COMBINATION AIR VALVE
ASSEMBLY LOCATED AT
HIGH POINT.

F-39
14.4 GPM
1"

F-38
16.4 GPM
1"

F-37
7.2 GPM
1"

F-36
19.6 GPM
1 1/4"

F-35
36.9 GPM
1 1/4"

F-34
20.3 GPM
1 1/4"

F-33
6.4 GPM
1"

ADD ALT #4 ARCA
BASE BID AREA
ALT #1 ADD ALT #2

F-32
10.9 GPM
1"

F-31
12.0 GPM
1"

F-30
15.6 GPM
1"

F-29
8.3 GPM
1"

F-28
9.4 GPM
1"

TECHNICAL
EDUCATION
BUILDING

SHEET I-2

WEBER STATE UNIVERSITY

PETERSON PLAZA

IRRIGATION PLAN

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Dsn: NCP
Drw: NCP
Chk: GHG
Rvw: JRL

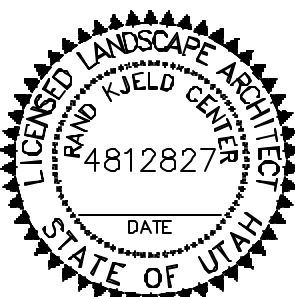
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I-3
of 6

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- NOTES:
1. LOCATE VALVE BOXES IN SHRUB BEDS IF POSSIBLE. AVOID GROUPING MORE THAN TWO VALVE BOXES.
 2. CAP DISTRIBUTION LINE FOR FUTURE EXPANSION.
 3. COMMUNICATION CABLE SHALL BE BURIED IN MAIN LINE TRENCH. CABLE SHALL BE IN 1" CONDUIT IN AREAS WITH NO MAIN LINE. AT END OF RUN, PROVIDE A 10' COIL IN VALVE BOX FOR FUTURE EXPANSION.
 4. SEE SHEET I-1 FOR IRRIGATION DISTRIBUTION LINE, MAINLINE LAYOUT.
 5. SEE SHEET I-1 FOR COMMUNICATION CABLE LAYOUT.



SCALE (FT.)



1	GHG	03/24/06	DFCM REVISIONS
0	GHG	06/03/05	ISSUED FOR BID
B	GHG	05/13/05	ISSUED FOR REVIEW
Rev.	By	Date	Remarks

IRRIGATION NOTES

1. IRRIGATION PLAN IS DIAGRAMMATIC. ALL IRRIGATION EQUIPMENT SHALL BE LOCATED IN PLANTING AREAS ONLY, UNLESS NOTED OTHERWISE. REFER TO THE IRRIGATION LEGEND, DETAILS, AND SPECIFICATIONS FOR EQUIPMENT AND INSTALLATION. SPECIFICATIONS SHALL TAKE PRECEDENCE OVER INSTALLATION DETAILS.

LANDSCAPE CONTRACTOR SHALL VERIFY LOCATION OF IRRIGATION POINT OF CONNECTION (POC) AND THE STATIC WATER PRESSURE AT THAT LOCATION PRIOR TO BEGINNING ANY IRRIGATION WORK. IF THE LOCATION OR WATER PRESSURE IS DIFFERENT THAN THAT EXPRESSED BY THE LANDSCAPE ARCHITECT, OR IF THE PRESSURE APPEARS TO BE UNUSUALLY HIGH OR LOW, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY.

3. CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND FREE OF EXCESS EQUIPMENT, MATERIALS AND RUBBISH INCIDENTAL TO WORK OF THIS SECTION.

4. PIPE FITTINGS SHALL BE AS FOLLOWS:
A. ALL RISERS AND EXPOSED FITTINGS SHALL BE P.V.C. SCHEDULE 80.
B. ALL UNDERGROUND FITTINGS SHALL BE P.V.C. SCHEDULE 40.
C. ALL MAIN LINE TWO AND HALF (2 ½) INCH OR GREATER SHALL USE DUCTILE IRON FITTINGS. ALL MAINLINE TWO (2) INCH OR SMALLER SHALL USE PVC FITTINGS.

5. IRRIGATION CONTROL WIRES SHALL CONFORM TO THE FOLLOWING:
A. ALL WIRE SHALL BE TYPE UF, 600 VOLT, SOLID COPPER, SINGLE CONDUCTOR WIRE. IT SHALL BE UL LISTED, DIRECT BURIAL TYPE, AND MINIMUM SIZE OF 14 GAUGE. ALL SPLICES AND CONNECTIONS SHALL BE WATER-TIGHT. ALL WIRES SHALL BE INSTALLED WITH TWO (2) FEET OF EXCESS WIRE (COILED) AT THE END OF EACH WIRE RUN, WIRE SPLICE, AND AT EACH CONTROLLER.
B. CONTROL WIRE SHALL BE BUNDLED EVERY 10' AND PLACED ADJACENT TO MAIN LINE. ALL WIRE SPLICES SHALL BE LOCATED IN VALVE BOXES.

6. FILTER SHALL BE INSTALLED PER DETAIL SHOWN. PROVIDE PERMANENTLY ATTACHED HOSE (10' LENGTH) FROM FILTER EXHAUST PORT TO DIRECT FLUSHING WATER AWAY FROM FILTER ASSEMBLY AND TOWARDS APPROPRIATE DRAINAGE LOCATION.

7. MANUAL DRAIN VALVES SHALL BE PLACED ON THE MAIN LINE AT ALL LOW SPOTS TO ENSURE COMPLETE DRAINAGE AND WINTERIZATION OF MAIN LINE. ALL MANUAL DRAINS SHALL BE PLACE IN SEPARATE VALVE BOXES PER INSTALLATION DETAILS.

8. CHECK VALVES SHALL BE USED WHERE INDICATED AND WHERE NECESSARY TO PREVENT WATER FLOW FROM LOWER ELEVATION HEADS WHEN SYSTEM IS TURNED OFF. INSTALL PER MANUFACTURE'S RECOMMENDATION, WITH A ONE (1) CU. FT. MIN. GRAVEL SUMP AROUND EACH CHECK VALVE.

9. ALL POP-UP SPRAY SPRINKLERS SHALL CONFORM TO THE FOLLOWING UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS:
A. SPRINKLERS LOCATED IN GRASS AREAS SHALL BE FOUR (4) INCHES IN HEIGHT.
B. SPRINKLERS LOCATED IN PLANTING BEDS SHALL BE TWELVE (12) INCHES IN HEIGHT.

10. ALL PRESSURE MAIN LINES SHALL BE EIGHTEEN (18) INCHES TO THIRTY (30) INCHES DEEP, AND ALL LATERAL LINES SHALL BE EIGHT (8) INCHES TO FOURTEEN (14) INCHES DEEP. TRENCH BEDDING AND BACKFILL MATERIAL SHALL BE EXISTING SITE SOIL FREE OF ROCKS, DEBRIS, ETC. GREATER THAN ONE (1) INCH IN ANY DIMENSION THAT MAY DAMAGE IRRIGATION PIPE OR EQUIPMENT. IN THE EVENT OF BACKFILL SETTLEMENT, CONTRACTOR SHALL PERFORM REQUIRED REPAIRS AT HIS OWN COST.

11. WHERE POSSIBLE, ALL AUTOMATIC CONTROL VALVES SHALL BE LOCATED WITHIN SHRUB AREAS AND INSTALLED IN GREEN VALVE BOXES, ONE VALVE PER BOX, WITH FOUR (4) INCHES OF 3/4" GRAVEL BENEATH THE VALVE. NO VALVE MANIFOLDS SHALL BE ALLOWED. GATE VALVES SHALL BE LOCATED IN SEPARATE VALVE BOXES. WIRE SPLICES SHALL ALSO BE LOCATED IN SEPARATE VALVE BOXES.

12. ALL MAIN LINE AND LATERAL LINES SHALL BE SLEEVED WITH P.V.C. SCHEDULE 40 PIPE (4" AND UNDER) OR CLASS 200 (GREATER THAN 4") WHERE THEY PASS UNDER PAVED AREAS. SLEEVE SIZE SHALL BE TWICE THE DIAMETER OF THE LINE TO BE SLEEVED UNLESS OTHERWISE NOTED ON THE PLANS.

13. AUTOMATIC CONTROLLERS SHALL BE OF THE SIZE AND TYPE NOTED, AND INSTALLED WHERE INDICATED ON IRRIGATION PLAN. CONTROL WIRES SHALL BE SLEEVED IN ELECTRICAL CONDUIT TO MAINLINE. 120-VOLT ELECTRICAL SERVICE TO CONTROLLERS SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR. COORDINATE THIS WORK WITH ELECTRICAL AND OTHER CONTRACTORS FOR THIS PROJECT.

14. A MASTER VALVE SHALL BE INSTALLED ALONG WITH APPROPRIATE FLOW SENSING EQUIPMENT TO ELIMINATE EXCESS SYSTEM FLOW SHOULD A VALVE STICK OPEN AFTER A CYCLE HAS BEEN COMPLETED OR A MAIN LINE BREAK OCCURS.

15. PRIOR TO BACKFILLING IRRIGATION TRENCHES:
A. ALL MAIN LINES IN THE SYSTEM SHALL BE CAPPED AND PRESSURE TESTED AT 125 P.S.I. FOR A PERIOD OF FOUR (4) HOURS. ANY LEAKS FOUND SHALL BE CORRECTED BY REMOVING THE LEAKING PIPE OR FITTINGS AND INSTALLING NEW MATERIAL IN ITS PLACE. REPEAT PRESSURE TEST TO ASSURE ABSENCE OF LEAKS.
B. ALL LATERAL LINES SHALL BE PRESSURE TESTED AT DESIGN PRESSURE FOR ONE (1) HOUR. DESIGN PRESSURE FOR THIS PROJECT IS 60 PSI.
C. THE CONTRACTOR SHALL NOT ALLOW NOR CAUSE ANY OF HIS WORK TO BE COVERED UNTIL IT HAS BEEN INSPECTED, TESTED AND APPROVED BY THE OWNER/OWNER'S AUTHORIZED REPRESENTATIVE.
D. WHERE MAIN LINE WILL BE ALLOWED TO SIT UNCOVERED FOR ANY LENGTH OF TIME IN THE TRENCH PRIOR TO TESTING, SHADE MAIN LINE WITH A THIN COVERING OF SOIL TO MINIMIZE WEATHER-RELATED EXPANSION OR CONTRACTION OF PIPE.

16. IRRIGATION CONTRACTOR SHALL ADJUST ALL HEADS TO PROVIDE A UNIFORM COVERAGE AND TO KEEP SPRAY OFF BUILDINGS, WALLS, PARKING AREAS, AND DRIVES.

17. WHEN THE SPRINKLER SYSTEM IS COMPLETED THE CONTRACTOR SHALL, IN THE PRESENCE OF THE OWNER/OWNER'S AUTHORIZED REPRESENTATIVE, PERFORM A COVERAGE TEST OF WATER PROVIDED TO THE PLANTING AREAS TO ENSURE IT IS CONSISTENT AND UNIFORM. THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES OF COVERAGE AT HIS OWN COST.

18. THE CONTRACTOR SHALL FURNISH TO THE OWNER A COMPLETE "AS BUILT" DRAWING ON MYLAR AND TWO PRINTS SHOWING EXACT LOCATIONS OF ALL ITEMS INSTALLED. THESE ARE TO BE DELIVERED ON OR BEFORE FINAL INSPECTION.

19. A REDUCED IRRIGATION PLAN INDICATING ALL SYSTEMS AND THEIR APPROPRIATE SEQUENCED VALVES SHALL BE LAMINATED IN MYLAR AND MOUNTED ON THE INSIDE COVER OF THE IRRIGATION CONTROLLER(S).

20. IRRIGATION CONTRACTOR SHALL MAINTAIN THE SYSTEM FOR THE DURATION OF THE CONTRACT PERIOD.

21. IRRIGATION CONTRACTOR SHALL GUARANTEE THE ENTIRE IRRIGATION SYSTEM TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE BY THE OWNER.

IRRIGATION MAINTENANCE NOTES

IT IS THE OWNER'S RESPONSIBILITY TO SUPPLY THESE PLANS WITH THE FOLLOWING NOTES AND SPECIFICATIONS, ALONG WITH CONTRACTOR DRAWN "AS BUILT" PLANS TO ANY AND ALL FUTURE OWNERS AND MAINTENANCE COMPANIES.

1. THE PURPOSE OF THIS SPRINKLER SYSTEM IS TO PROVIDE ONLY SUFFICIENT WATER TO MAINTAIN PLANT LIFE DURING DRY WEATHER CONDITIONS OR SUMMER SEASONS. TIME CLOCKS SHALL BE READJUSTED CONTINUOUSLY THROUGHOUT THE SEASON, ON A WEEKLY BASIS IF NECESSARY, TO PROVIDE WATER ONLY WHEN THE SOIL IS DRY AT A DEPTH OF FOUR (4) INCHES THE FIRST INITIAL GROWING SEASON AND SIX (6) INCHES THE FOLLOWING YEARS. IF THE GROUND IS MOIST EITHER AT THE SURFACE OR A DEPTH OF FOUR (4) INCHES DURING THE FIRST YEAR AFTER INITIAL PLANT ESTABLISHMENT, OR IS MOIST AT A DEPTH OF SIX (6) INCHES THEREAFTER, SHUT THE TIME CLOCKS OFF AND DO NOT APPLY ADDITIONAL WATER UNTIL SOIL HAS BEEN ALLOWED TO DRY. READJUST TIME CLOCK PRIOR TO TURNING VALVES BACK ON. IF RAIN IS FORECAST OR IS EMINENT, ALL IRRIGATION SYSTEMS SHALL BE SHUT OFF AND NOT REACTIVATED UNTIL THE SOIL HAS DRIED TO THE ABOVE DEPTHS.

2. IF ANY SUBSURFACE DRAINAGE OR RUN-OFF IS VISIBLE AT LOW AREAS, ACROSS SIDEWALKS OR AT LOWER PORTIONS OF SLOPES, IMMEDIATELY SHUT THE VALVES OFF TO ALLOW THE AREA TO COMPLETELY DRY OUT. IF THIS CONDITION CONTINUES AFTER SUBSEQUENT WATERINGS, A QUALIFIED GEOLOGIST OR GEOTECHNICAL ENGINEER MUST BE RETAINED TO PROVIDE RECOMMENDATIONS TO ELIMINATE SUBSURFACE WATER OR DRAINAGE PROBLEMS. IF DURING NORMAL IRRIGATION, PONDING TAKES PLACE ON ANY LANDSCAPE AREA, DRIVES, PARKING AREAS OR ANY OTHER AREA, THE IRRIGATION SYSTEM SHALL BE IMMEDIATELY SHUT OFF AND A LICENSED CIVIL ENGINEER SHALL BE IMMEDIATELY CONTACTED TO PROVIDE RECOMMENDATIONS FOR POSITIVE AND PROPER DRAINAGE.

3. INSPECTIONS OF IRRIGATION SYSTEM SHALL BE MADE ON A DAILY BASIS TO OBSERVE AND PROVIDE REPAIRS OR REMEDIES TO THE FOLLOWING UNACCEPTABLE PROBLEMS:
A. OVER-SPRAY ON SIDEWALKS, STREETS, PAVED AREAS, PARKING AREAS, FENCES, WALLS, BUILDINGS OR STRUCTURES.
B. DRAINAGE OR RUN-OFF ACROSS SIDEWALKS, PAVING OR STREETS.
C. DAMAGED OR IMPROPERLY OPERATING HEADS, PIPING, VALVES, CONTROLLERS OR OTHER IRRIGATION EQUIPMENT.
D. IMPROPERLY ADJUSTED OR OPERATING MOISTURE SENSORS.

4. ONLY LICENSED AND QUALIFIED LANDSCAPE CONTRACTORS AND LANDSCAPE MAINTENANCE INDIVIDUALS SHALL PROVIDE OR MAKE REPAIRS TO IRRIGATION SYSTEM.

5. AT ALL TIMES, THE LANDSCAPE CONTRACTOR OR MAINTENANCE CONTRACTOR SHALL ASSIGN A QUALIFIED INDIVIDUAL OR INDIVIDUALS TO INSPECT AND MONITOR THE IRRIGATION SYSTEM. OWNERS SHALL BE SUPPLIED WITH 24 HOUR EMERGENCY PHONE NUMBERS FOR USE IN REPORTING BROKEN OR DAMAGED IRRIGATION EQUIPMENT.

6. ALL IRRIGATION EQUIPMENT REQUIRES CONTINUOUS MAINTENANCE, CLEANING, ADJUSTMENT, PARTS REPLACEMENT AND INSPECTION. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR OR LANDSCAPE MAINTENANCE COMPANY TO PROVIDE THESE SERVICES ON A CONTINUAL AND REGULAR BASIS AND SCHEDULE.

7. WATER SHALL BE APPLIED TO PLANTING AREAS IN SHORT INTERVALS OR MOISTURE SENSORS SHALL BE ADJUSTED TO PROHIBIT ANY SURFACE PONDING OR RUN-OFF, AND AT NO TIME SHALL WATER BE APPLIED TO CAUSE SOIL SATURATION.

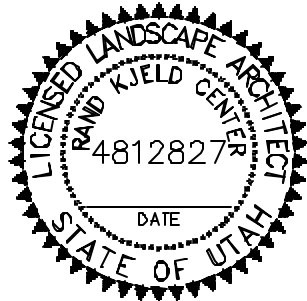
8. OVERWATERING CAN RESULT IN DEATH OF PLANTS, POSSIBLE SOIL EXPANSION AND DAMAGE TO CONCRETE AND ASPHALT PAVING, DAMAGE TO FOUNDATIONS AND POSSIBLE LOSS OF SOIL COMPACTION. A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE RETAINED TO PROVIDE SITE INSPECTIONS AT LEAST ON AN ANNUAL BASIS TO INSPECT FOR EXCESS SOIL MOISTURE.

ENSURING THAT THE ABOVE PRECAUTIONS, REPAIRS AND CONTINUING MAINTENANCE ARE PROPERLY PERFORMED IS THE RESPONSIBILITY OF THE OWNER. THE LANDSCAPE ARCHITECT HAS BEEN RETAINED TO PREPARE THESE PLANS ONLY, AND DOES NOT PROVIDE POST CONSTRUCTION REVIEWS NOR REVIEWS OF ON-SITE MAINTENANCE. THE LANDSCAPE ARCHITECT DOES NOT ASSUME RESPONSIBILITY NOR LIABILITY OF MAINTENANCE OR REVIEW OF MAINTENANCE WORK OR REPAIRS OR DAMAGES RESULTING FROM LACK OF REPAIRS, MAINTENANCE, ADJUSTMENTS OR IMPROPER INSTALLATION OF IRRIGATION EQUIPMENT.

IRRIGATION EQUIPMENT SCHEDULE

SYM.	MANUF.	MODEL NUMBER	DESCRIPTION	PSI	GPM	RADIUS
○	HUNTER	INST-04-CV-10A	POP-UP SPRAY SPRINKLER & NOZZLE	30	VARIES	10'
●	"	INST-04-CV-10Q	" " " "	30	0.49	10'
●	"	INST-04-CV-10H	" " " "	30	0.97	10'
○	HUNTER	INST-04-CV-10F	POP-UP SPRAY SPRINKLER & NOZZLE	30	1.95	10'
□	HUNTER	INST-04-CV-12A	POP-UP SPRAY SPRINKLER & NOZZLE	30	VARIES	12'
■	"	INST-04-CV-12Q	" " " "	30	0.71	12'
■	"	INST-04-CV-12H	" " " "	30	1.42	12'
□	HUNTER	INST-04-CV-12F	POP-UP SPRAY SPRINKLER & NOZZLE	30	2.85	12'
▽	HUNTER	INST-04-CV-15A	POP-UP SPRAY SPRINKLER & NOZZLE	30	VARIES	15'
▼	"	INST-04-CV-15Q	" " " "	30	0.93	15'
▼	HUNTER	INST-04-CV-15H	POP-UP SPRAY SPRINKLER & NOZZLE	30	1.86	15'
▽	HUNTER	INST-04-CV-17A	POP-UP SPRAY SPRINKLER & NOZZLE	30	VARIES	17'
Ⓐ	HUNTER	INST-12-CV-body	POP-UP ROTOR SPRINKLER & NOZZLE	"	"	"
WALLA WALLA SPRINKLER CO. Ⓑ	HUNTER	MP2000 90-210 nozzle	" " " "	45	0.47-0.78	15-20'
WALLA WALLA SPRINKLER CO. Ⓒ	HUNTER	MP2000 210-270 nozzle	" " " "	45	1.17	15-20'
WALLA WALLA SPRINKLER CO. Ⓓ	HUNTER	INST-12-CV-body	" " " "	"	"	"
WALLA WALLA SPRINKLER CO. Ⓔ	HUNTER	MP2000 360 nozzle	POP-UP ROTOR SPRINKLER & NOZZLE	45	1.56	15-20'
Ⓘ	HUNTER	INST-12-CV-body	POP-UP ROTOR SPRINKLER & NOZZLE	"	"	"
WALLA WALLA SPRINKLER CO. Ⓚ	HUNTER	MP3000 90-210 nozzle	" " " "	45	0.91-1.93	23-30'
WALLA WALLA SPRINKLER CO. Ⓛ	HUNTER	INST-12-CV-body	" " " "	"	"	"
WALLA WALLA SPRINKLER CO. Ⓜ	HUNTER	MP3000 360 nozzle	POP-UP ROTOR SPRINKLER & NOZZLE	45	3.86	23-30'
Ⓝ	HUNTER	INST-12-CV-body	POP-UP ROTOR SPRINKLER & NOZZLE	"	"	"
WALLA WALLA SPRINKLER CO. Ⓨ	HUNTER	MP1000 90-210 nozzle	" " " "	45	0.20-0.40	11-14'
Ⓐ	HUNTER	I-20-ADV-1.0(Q)	POP-UP ROTOR SPRINKLER & NOZZLE	50	1.2	21-31'
Ⓐ	"	I-20-36V-1.0(F)	" " " "	50	1.2	21-31'
Ⓐ	"	I-20-ADV-2.0(H)	" " " "	50	2.0	26-36'
Ⓐ	HUNTER	I-20-36V-2.0(F)	POP-UP ROTOR SPRINKLER & NOZZLE	50	2.0	26-36'
Ⓐ	HUNTER	I-20-ADV-3.0(Q)	POP-UP ROTOR SPRINKLER & NOZZLE	50	2.7	29-38'
Ⓐ	"	I-20-ADV-6.0(H)	" " " "	50	5.5	32-43'
Ⓐ	HUNTER	I-20-36V-6.0(F)	POP-UP ROTOR SPRINKLER & NOZZLE	50	5.5	32-43'
◐	RAINBIRD	EFB-CP-PRS-D	ELECTRIC BRASS REMOTE CONTROL VALVE ASSEMBLY WITH PRESSURE REGULATION (see plans for sizes)			
◑	RAINBIRD	EFB-CP	ELECTRIC BRASS REMOTE CONTROL VALVE ASSEMBLY (see plans for sizes)			
⊗	HUNTER	HCV	CHECK VALVE PLACED AT EVERY EIGHT FEET OF ELEVATION CHANGE			
⦿	RAINBIRD	44LRC	QUICK COUPLING VALVE ASSEMBLY (including key and swivel hose ell)			
T	FORD	B11-333	MANUAL DRAIN VALVE ASSEMBLY			
⌘	NIBCO		RESILIENT SEAT GATE VALVE, NON-RISING STEM (line size)			
⌘	RAPHAEL	C-040-32-636	4" MASTER CONTROL VALVE ASSEMBLY, NORMALLY OPEN, PRESSURE REGULATING, 2-WAY BRASS PILOT, GREEN SPRING			
□	AMiAD	2-0420-1110-4030	4" SUPER STEEL INLINE FILTER ASSEMBLY WITH A BRUSHAWAY CLEANING SYSTEM AND WEAVEWIRE SCREEN (50 mesh - 300 micron) IN STEEL ENCLOSURE. (see detail on plans)			
Ⓢ	RAINMASTER	FS-150	1 1/2" FLOW SENSOR			
⚠	RAINMASTER	DX42-UPED-T EV-GROUND-ROD DX-FLOW DX-HW	42 STATION EVOLUTION CONTROLLER WITH PEDISTAL ENCLOSURE, PLUS THE FOLLOWING: 5/8"x8' COPPER CLAD GROUNDING ROD WITH CLAMP FLOW SENSING CIRCUIT BOARD HARDWIRE COMMUNICATION BOARD			
—COM—	RAINMASTER	EV-CAB-COM	DIRECT BURIAL COMMUNICATION CABLE (length as required)			
—SEN—	RAINMASTER	EV-CAB-SEN	DIRECT BURIAL CABLE CONNECTING FLOW SENSOR TO CONTROLLER (length as required)			
—■—	APCO		COMBINATION AIR VALVE ASSEMBLY (SIZED BY MANUFACTURER)			
— — — — —		CL. 200 O-RING	PVC PIPE (MAIN LINE) W/ DUCTILE IRON FITTINGS: ADD MJ AT ALL DIRECTION CHANGES.			
— · · · · · —		CL. 200 O-RING	PVC PIPE (FUTURE SERVICE LINE) W/ DUCTILE IRON FITTINGS: ADD MJ AT ALL DIRECTION CHANGES.			
—————		SCH. 40	PVC PIPE (LATERALS) *			
▨▨▨▨▨▨▨▨▨▨		SCH. 40 OR CL. 200	PVC PIPE (SLEEVES) * **			

** ALL SLEEVES TO BE TWICE THE SIZE OF PIPE BEING SLEEVED.
ALL MAIN LINE SLEEVES TO BE PARALLELED BY A 2" SLEEVE FOR CONTROLL WIRES.
* ALL P.V.C. PIPE 4" AND LESS TO BE SCH. 40. ALL P.V.C. PIPE LARGER THAN 4" TO BE CL. 200.



WEBER STATE UNIVERSITY

PETERSON PLAZA

IRRIGATION NOTES

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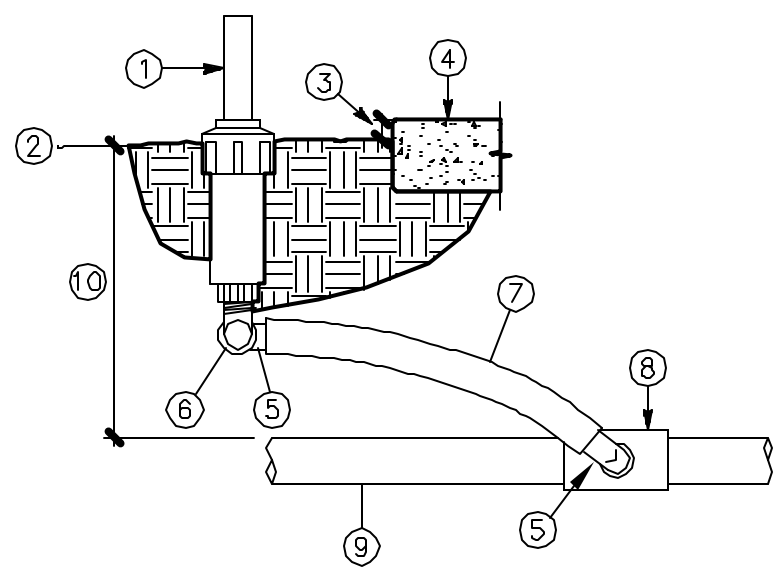
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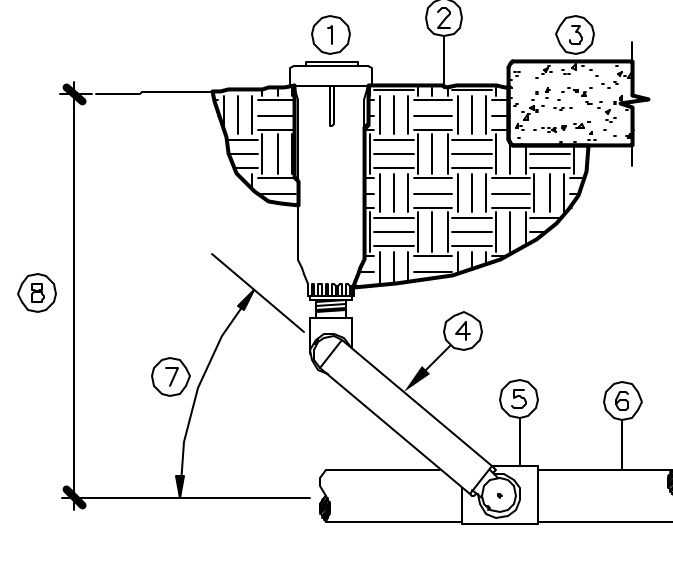
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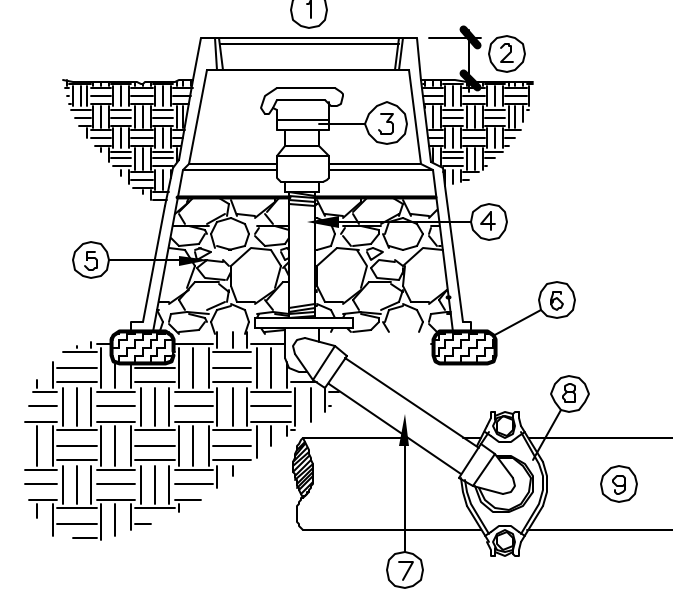
- POP-UP SPRAY HEAD - SEE LEGEND
- FINISH GRADE
- 1" - 1 1/2"
- NOTE: ALL SPRAY HEADS TO BE PLACED 2" CLEAR OF ALL HARDSCAPE SURFACES
- SWING PIPE ELL WITH SPIRAL BARB FITTING (TYP.)
- MARLEX STREET ELL
- FLEXIBLE SWING PIPE, 12" MIN. LENGTH
- PVC SCH 40 SxSxT TEE (OR ELL)
- PVC LATERAL LINE, SIZE AS NOTED ON PLAN
- DEPTH - SEE NOTES & TRENCH DETAIL

A 4" POP-UP SPRAY SPRINKLER
NTS



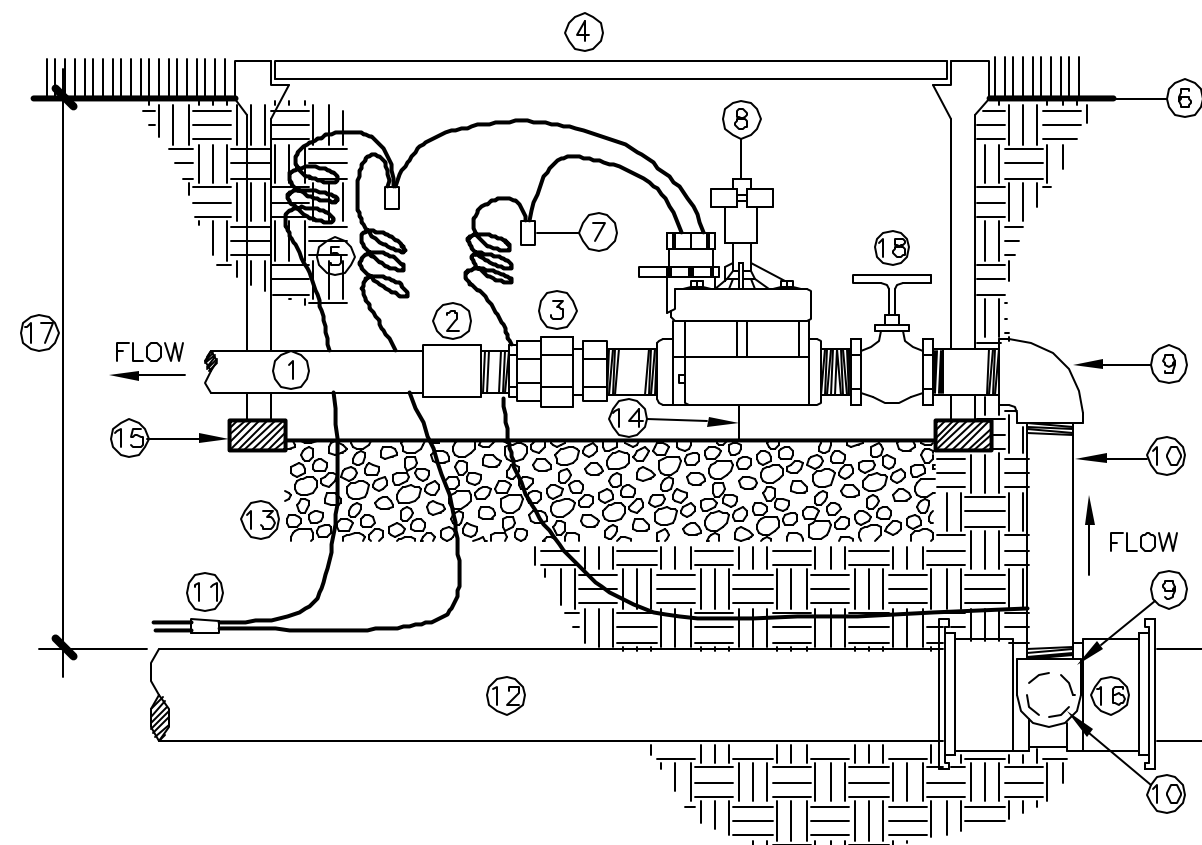
- POP-UP ROTOR SPRINKLER - SEE LEGEND
- FINISH GRADE
- NOTE: ALL SPRAY HEADS TO BE PLACED 2" CLEAR OF ALL HARDSCAPE SURFACES
- LASCO UNITIZED SWING JOINT, OR SPEARS SWING JOINT RISER ASSEMBLY; B" LENGTH; SIZE AS REQUIRED
- PVC SCH 40 SxSxT TEE (OR ELL)
- PVC LATERAL LINE, SIZE AS NOTED ON PLAN
- SWING JOINT ARM INSTALLED AT ANGLE BETWEEN 30 AND 45 DRG. OF LATERAL PIPE
- DEPTH - SEE NOTES & TRENCH DETAIL

B POP-UP GEAR DRIVE ROTOR SPRINKLER
NTS



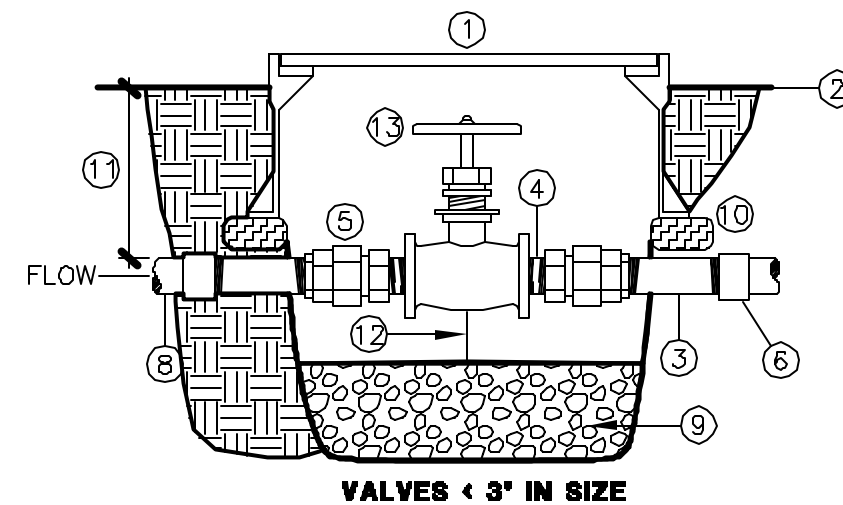
- 10" ROUND GREEN PLASTIC VALVE BOX, CARSON-BROOKS 910 OR EQUAL
- HEIGHT ABOVE FINISH GRADE: 1 1/2" IN TURF AREAS (SODDED); 1" IN TURF AREAS (SEEDED); 2" IN PLANTING AREAS
- QUICK COUPLER VALVE - SEE EQUIPMENT SCHEDULE
- BRASS NIPPLE, LENGTH AS REQUIRED
- 6" MIN. DEPTH CLEAN PEA GRAVEL
- REDWOOD OR BRICK BLOCKING, TYPICAL
- 12" LASCO UNITIZED SWING JOINT W/ BRASS INSERT STABILIZER ELBOW, OR 12" SPEARS SWING JOINT RISER ASSEMBLY W/ BRASS FEMALE THREAD 90° ELL OUTLET
- DUCTILE IRON SERVICE SADDLE W/ S.S. STRAP (SIDE MOUNTED, SIZE AS REQUIRED)
- PVC MAIN LINE

C QUICK COUPLING VALVE
NTS



- LATERAL LINE
- PVC SCH. 80 FEMALE ADAPTER
- PVC SCH. 80 UNION
- GREEN PLASTIC VALVE BOX W/ BOLT LOCK (CARSON-BROOKS OR APPROVED EQUAL), SIZE AS REQUIRED
- PROVIDE 12" EXPANSION LOOP AT EACH WIRE CONNECTOR IN BOX
- FINISH GRADE
- WATER TIGHT WIRE CONNECTORS (TYP.)
- ELECTRIC CONTROL VALVE - SEE IRRIGATION EQUIPMENT SCHEDULE
- SCH. 80 PVC ELL
- SCH. 80 PVC TOE NIPPLE, LENGTH AS REQ'D
- WIRES TO CONTROLLER, TAPE AND BUNDLE EVERY 10" - SEE TRENCH DETAIL
- PVC MAIN LINE
- 4" MIN. DEPTH PEA GRAVEL
- 2" MIN. CLEARANCE REQUIRED
- 2"x4" REDWOOD OR BRICK BLOCKING (TYP.)
- DUCTILE IRON SERVICE TEE, SIZE AS REQ'D
- DEPTH - SEE NOTES
- GATE VALVE (LINE SIZE)

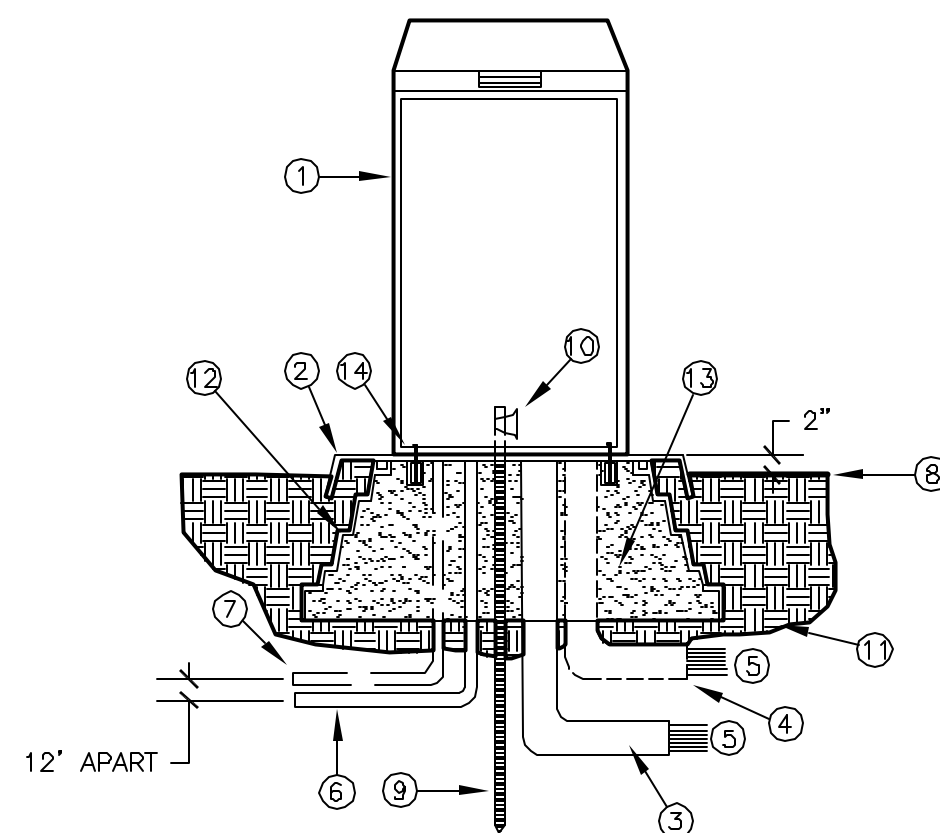
D CONTROL VALVE ASSEMBLY
NTS



- 10" ROUND PLASTIC VALVE BOX, W/ LOCK BOLT, CARSON-BROOKS 910 OR EQUAL, MARKED "G.V." WITH 2" WHITE LETTERS
- FINISH GRADE
- METAL NIPPLE, 12" MIN. LENGTH, PER BELOW:
1" - 1 1/4" DIA. = GALVANIZED STEEL NIPPLE
1 1/2" - 3" DIA. = DUCTILE IRON NIPPLE
- 2" NIPPLE, DIA. AS REQUIRED
- BRASS UNION (TYP.)
- PVC SCH. 80 FEMALE ADAPTOR (TYP.)
- BELL x FLANGE METAL ADAPTER (TYP.)
- PVC MAINLINE
- 4" MIN. DEPTH CLEAN PEA GRAVEL
- 2"x4" REDWOOD OR BRICK BLOCKING (TYP.)
- DEPTH - SEE NOTES
- 2" MINIMUM CLEARANCE REQUIRED
- GATE VALVE (LINE SIZE) - SEE EQUIPMENT SCHEDULE

NOTES:
VALVES ≥ 2" Ø SHALL HAVE 2" SQUARE OPERATING NUTS.
MEGA LUG FITTINGS MAY BE USED AS REQUIRED.

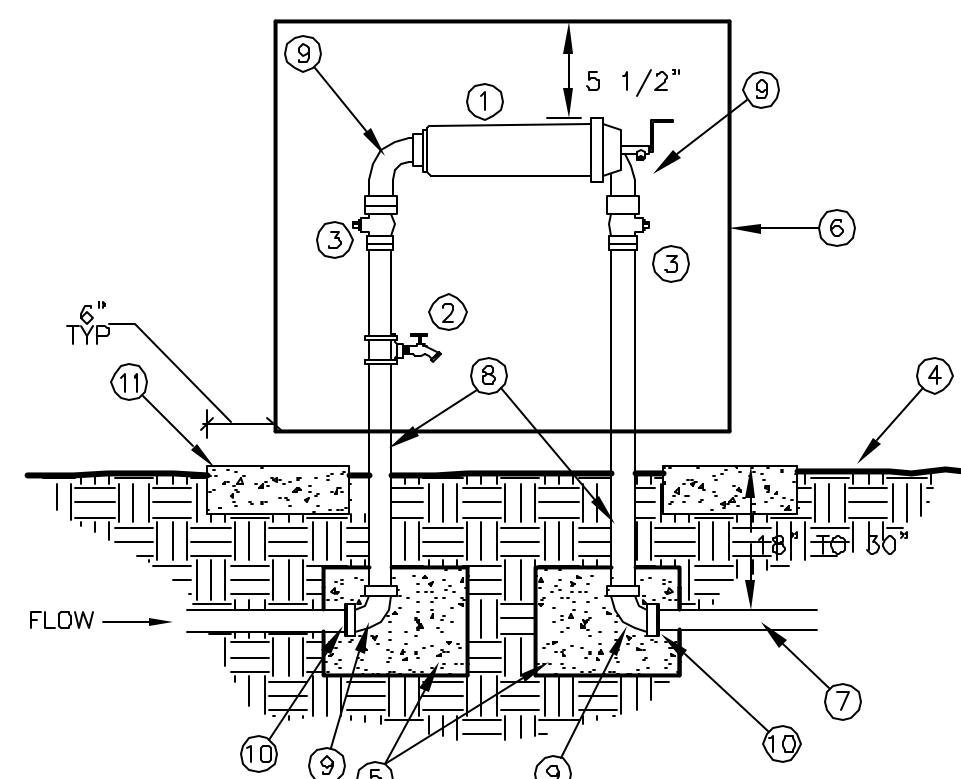
E ISOLATION GATE VALVE
NTS



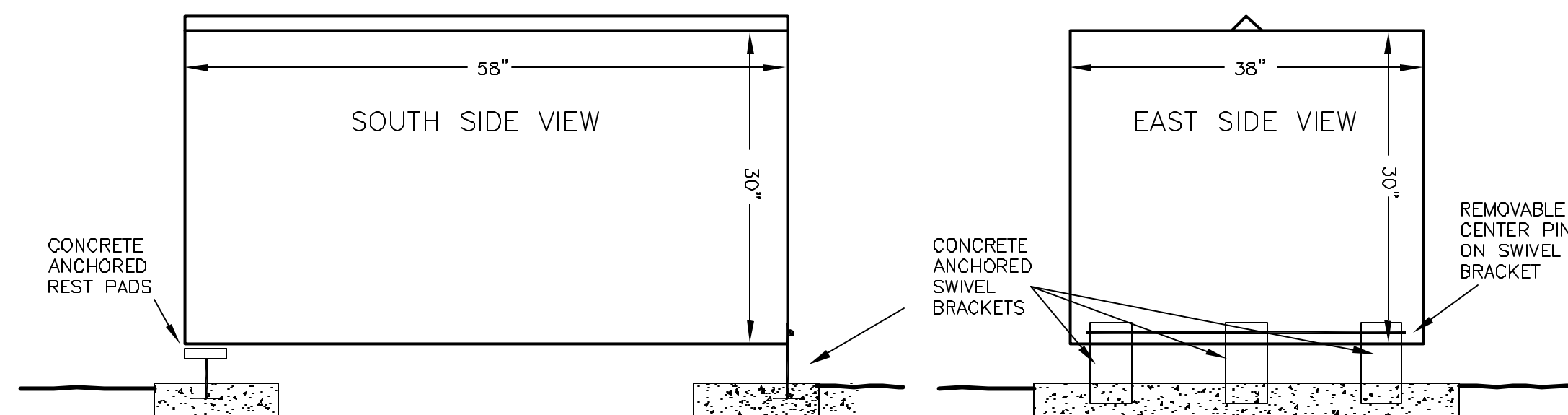
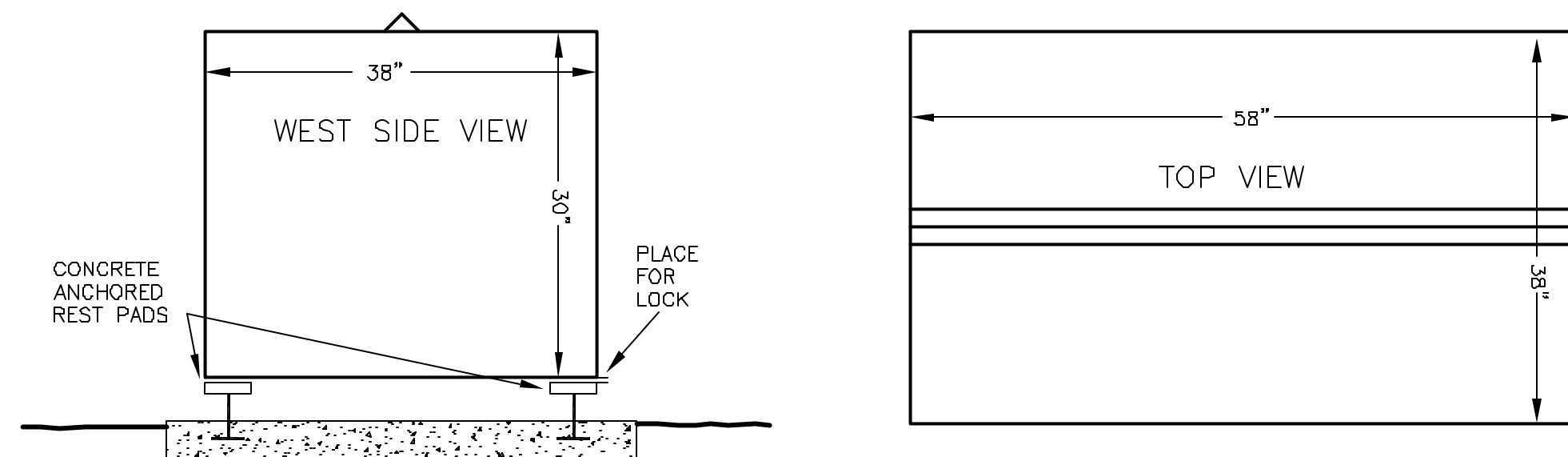
- CONTROLLER AND CONTROLLER ENCLOSURE - SEE IRRIGATION EQUIPMENT SCHEDULE
- QUICKPAD 3/16" MIN. THICKNESS ALUMINUM POWDER COATED PERFORMED PAD
- PVC SWEEP ELL STATIONS 1-24
- PVC SWEEP ELL STATIONS 25-40 (IF APPLICABLE)
- DIRECT BURIAL CONTROL WIRES TO CONTROL VALVES
- 110-VOLT SERVICE IN CONDUIT
- EV-CAB-COM CABLE 1" CONDUIT
- FINISH GRADE
- 5/8" X 8" COPPER GROUND ROD
- BRONZE GROUND CLAMP
- UBGRADE COMPACTED TO 90%
- PREFORMED PAD SUPPORT BASE
- FILL INSIDE BASE WITH PEA GRAVEL
- QUICKPAD FASTENING BRACKET (2)

F CONTROLLER & ENCLOSURE
NTS

- STEEL INLINE FILTER WITH WEAWEWIRE SCREEN (300 MICRON) SEE PLAN FOR SIZE
- 3/4" BRASS HOSE BIB AND SADDLE
- FL WAFER BUTTERFLY VALVE-SAME AS LINE SIZE
- FINISH GRADE
- CONCRETE THRUST BLOCKS (TYP.). WRAP PIPES W/ 10 MIL TAPE. CAST AGAINST UNDISTURBED SOIL
- BACKFLOW ENCLOSURE - SEE IRRIGATION EQUIPMENT SCHEDULE (FILTER) (INSTALL PER MANUFACTURER'S SPECIFICATIONS)
- FL CAST PIPE-SAME AS LINE SIZE
- FL X PE, SPOOL LENGTH AS REQUIRED (TYP.)
- FL ELL (TYP.)-SAME AS LINE SIZE
- INSTA-FLANGE ADAPTER-SAME AS LINE SIZE
- 4" THICK CONCRETE PAD (SIZE AS REQUIRED)



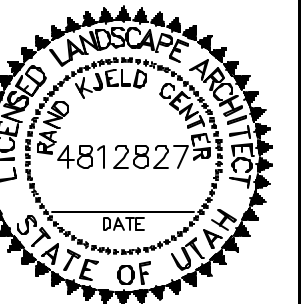
G FILTER ASSEMBLY
NTS

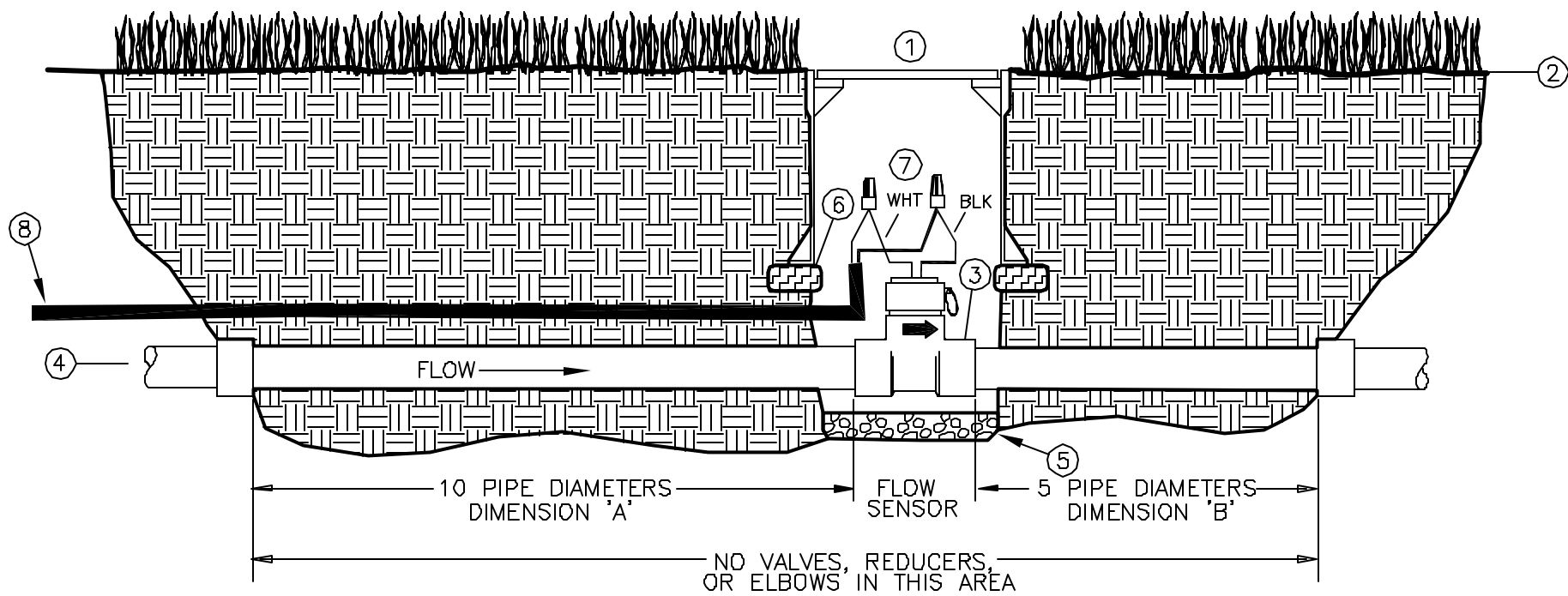


H FILTER ENCLOSURE
NTS

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0	GHG	06/03/05	ISSUED FOR BID
B	GHG	05/13/05	ISSUED FOR REVIEW
Rev.	By	Date	Remarks

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PETERSON PLAZA		
IRRIGATION DETAILS		
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OGDEN - (801) 389-1662		Chk: GHG
		Rvw: JRL
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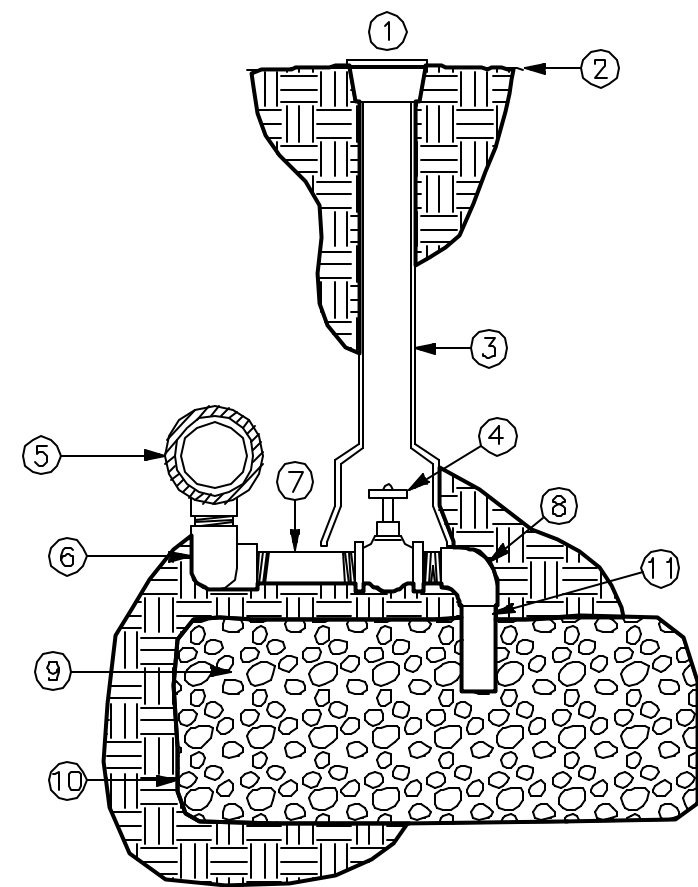




- ① 10" ROUND GREEN PLASTIC VALVE BOX, W/ BOLT LOCK, AMATEK OR EQUAL, MARKED "G.V." IN 2" WHITE LETTERS
② FINISH GRADE
③ FLOW SENSOR
④ PVC MAINLINE
⑤ 4" MIN. DEPTH PEA GRAVEL
⑥ 2x4 REDWOOD OR BRICK BLOCKING
⑦ WATERPROOF WIRE SPLICES
⑧ SENSOR CABLE TO CONTROLLER

A FLOW SENSOR INSTALLATION

NTS

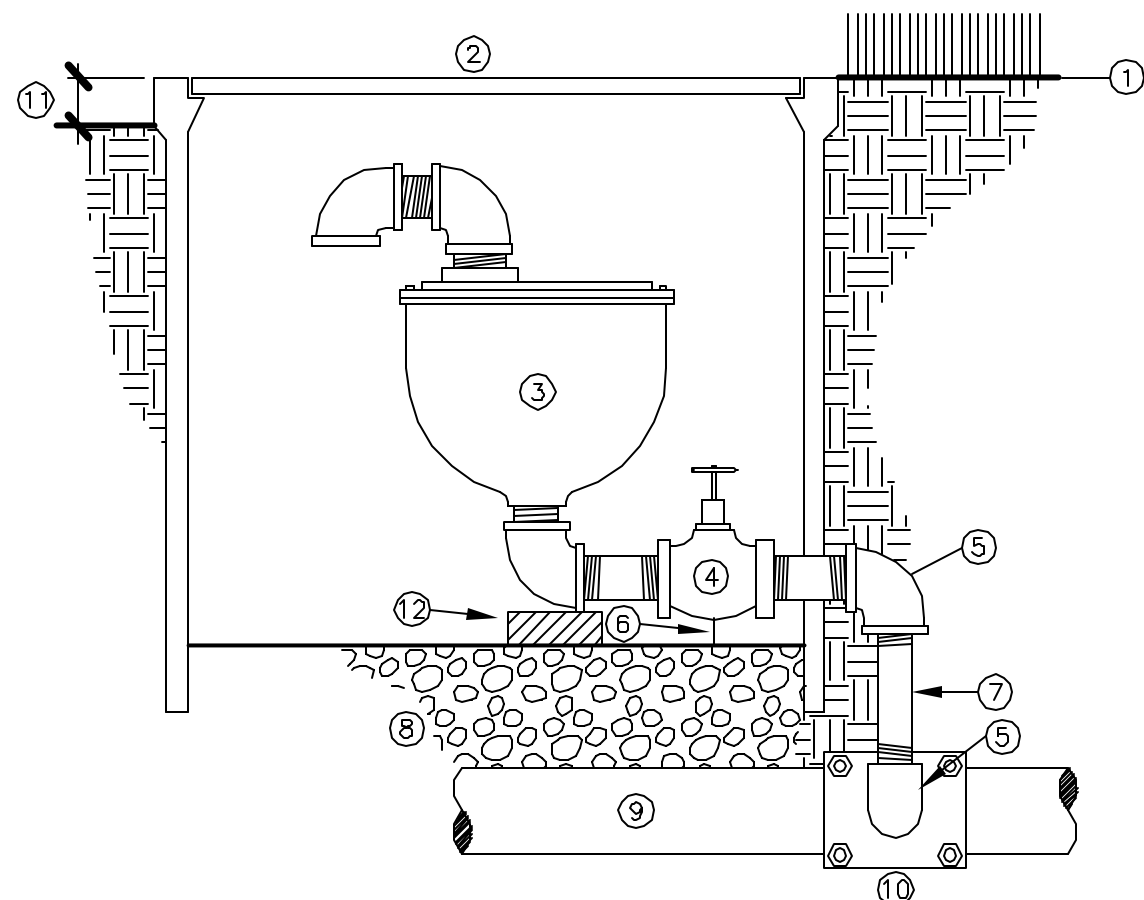


- ① ADJUSTABLE CURB BOX W/ BOLT LID, CARSON-BROOKS 250 OR EQUAL
② FINISH GRADE
③ ADJUST HEIGHT AS REQUIRED
④ 3/4" BRASS GLOBE VALVE W/ CROSS HANDLE - SEE IRRIGATION EQUIPMENT SCHEDULE
⑤ PVC MAINLINE & D. I. SERVICE TEE
⑥ (2)-FIPTxFIPT 90° ELL
(2)-3/4" x CLOSE PVC NIPPLE
⑦ 3/4"x6" PVC NIPPLE
⑧ 3/4" 90° STREET ELL
⑨ 3/4" ROCK SUMP - 6 C.F. MIN. SIZE
⑩ FILTER FABRIC COVERING ROCK SUMP
⑪ 3/4" x 6" PVC NIPPLE

NOTE:
1) ALL PVC NIPPLES TO BE SCHEDULE 80.
2) PROVIDE VALVE KEY TO OWNER

D MANUAL DRAIN VALVE

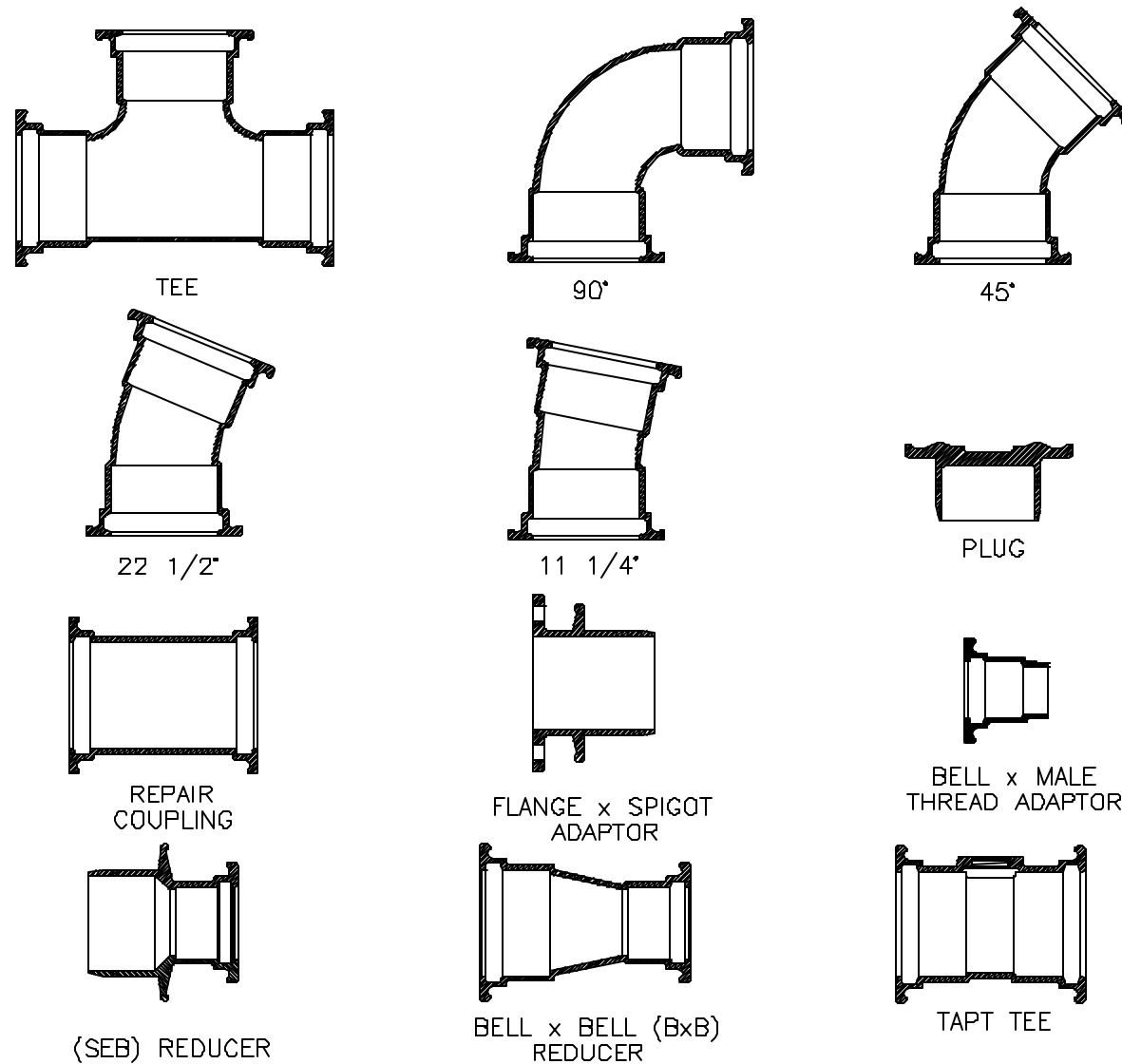
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- ① FINISH GRADE
② JUMBO PLASTIC VALVE BOX W/ LOCK BOLT, AND EXTENSION, CARSON-BROOKS OR EQUAL.
③ COMBINATION AIR VALVE - SEE IRRIGATION EQUIPMENT SCHEDULE (INSTALL PER MANUFAC. SPECS.)
④ BRASS BALL VALVE, SIZE AS REQUIRED
⑤ 90° BRASS OR GALV. ELL (TYP.)
⑥ 2" MIN. CLEARANCE REQUIRED
⑦ BRASS OR GALV. NIPPLE, LENGTH AS REQUIRED (TYP.)
⑧ 6" MIN. DEPTH WASHED PEA GRAVEL
⑨ MAIN LINE
⑩ MJ OR SS DOUBLE STRAPPED SERVICE SADDLE
⑪ HEIGHT AT FINISHED GRADE OR AT 2" IN PLANTING BEDS
⑫ SUPPORT BLOCK FOR VALVE RECOMMENDED

G COMBINATION AIR VALVE ASSEMBLY

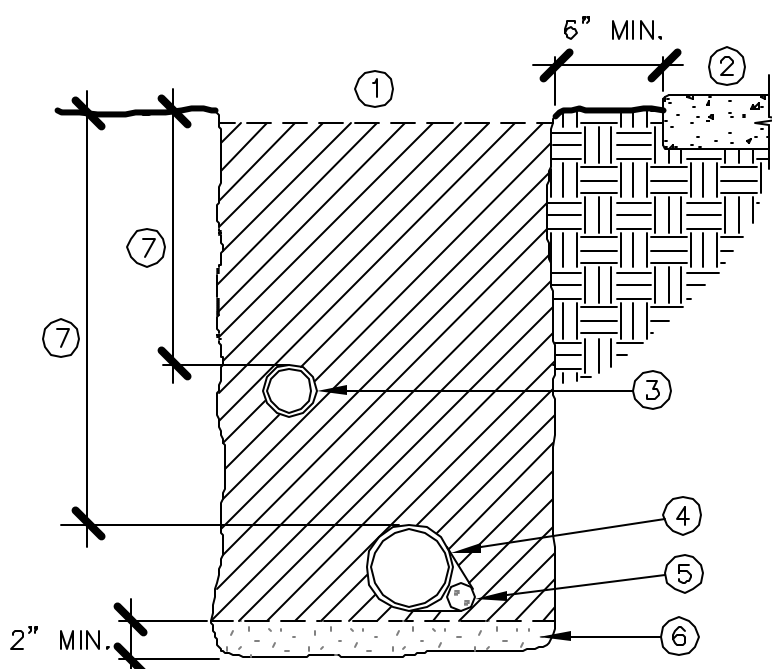
NTS



SUGGESTED SPECIFICATIONS:
ALL 4" AND LARGER FITTINGS, AND 3", 2 1/2", & 2" FULL SIZE TEES SHALL BE MANUFACTURED OF DUCTILE IRON, GRADE 65-45-12 IN ACCORDANCE WITH ASTM A-536. FITTINGS SHALL HAVE DEEP BELL PUSH-ON JOINTS WITH GASKETS MEETING ASTM F-477. FITTINGS SHALL BE "HARCO DEEP BELL" AS MANUFACTURED BY THE HARRINGTON CORPORATION OF LYNCHBURG, VA. TRANSITION GASKETS ARE NOT ALLOWED.

B DUCTILE IRON FITTINGS

NTS

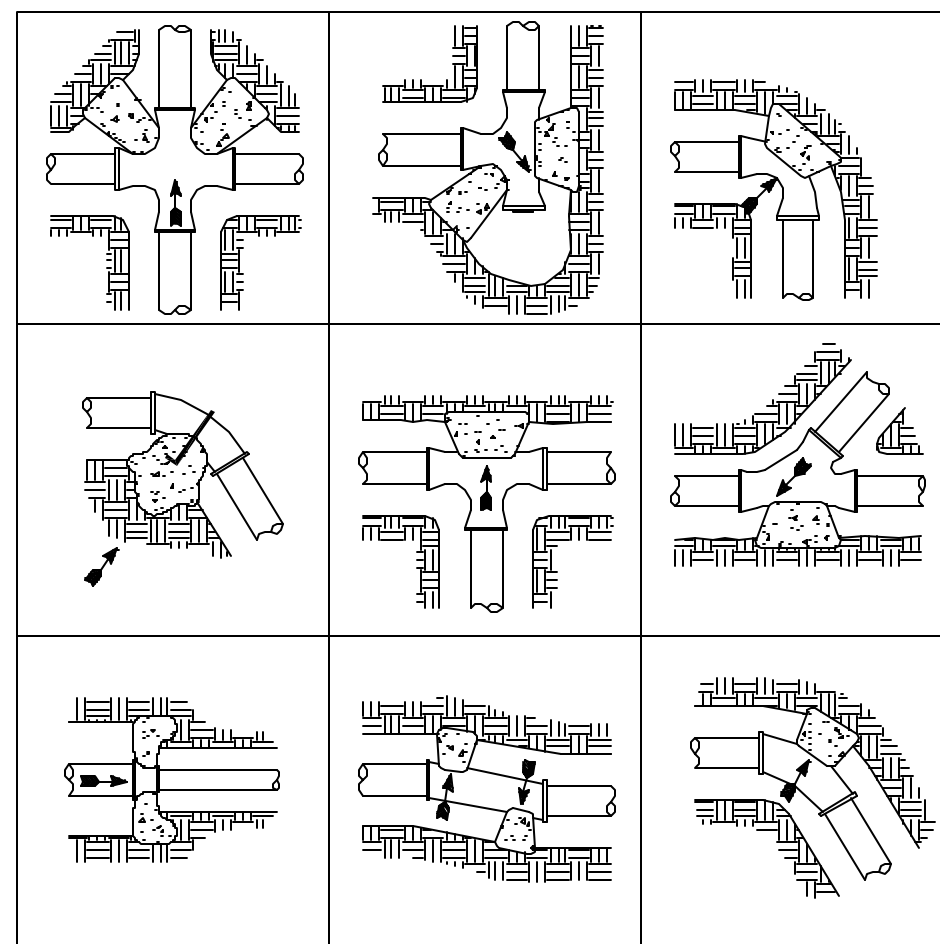


- ① BACKFILL MATERIAL - SEE NOTES, COMPACT TO 90% MIN.
② ADJACENT HARD SURFACE
③ NON-PRESSURE LATERAL LINE
④ PRESSURE MAIN LINE
⑤ DIRECT BURIAL, LOW VOLTAGE CONTROL WIRES; TAPE AND BUNDLE AT 10 FT. O.C.
⑥ BEDDING MATERIAL - SEE NOTES
⑦ PIPE DEPTHS - SEE NOTES

NOTE: SEE SLEEVING DETAIL FOR TRENCHING IN PAVED AREAS.

E TRENCH DETAIL

NTS



← DIRECTION OF THRUST (TYP.)
INSTALL THRUST BLOCKS ON ALL 3" FITTINGS AND VALVES

H THRUST BLOCK DETAILS

NTS

THRUST BLOCKING INSTRUCTIONS

- PROVIDE THRUST BLOCKS AT ALL CHANGES IN SIZE OR DIRECTION. BENDS, REDUCERS, PLUGS, AND THE OPPOSITE SIDE OF TEE BRANCHES ALL REQUIRE THRUST BLOCKS.
- THE SIZES OF THE BLOCKS ARE DETERMINED BY THE WORKING PRESSURE, THE SIZE AND TYPE OF FITTING, AND SOIL CONDITIONS AT THE JOB SITE. TO CALCULATE THE AREA OF CONTACT WITH THE SOIL, FOLLOW THESE STEPS:
CALCULATE THE THRUST BY SELECTING THRUST/100 BY SIZE AND TYPE OF FITTING FROM TABLE 1 AND MULTIPLYING THRUST/100 BY SYSTEM PRESSURE DIVIDED BY 100.
- DIVIDE THE TOTAL THRUST BY BEARING CAPACITY OF THE SOIL IN EXCAVATION (FROM TABLE 2) TO DETERMINE THE AREA IN SQUARE FEET OF THRUST BLOCK REQUIRED TO BE IN CONTACT WITH THE UNDISTURBED SOIL.

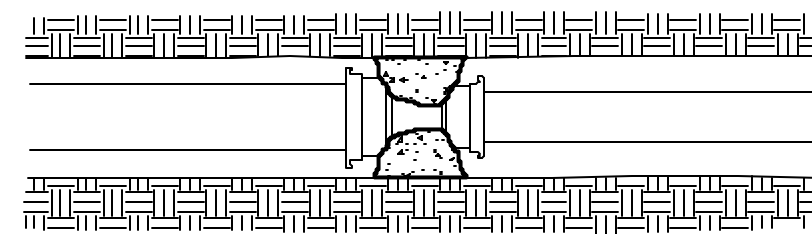


TABLE 1 - THRUST/100

Size	Tees Plugs	90° Bends	45° Bends	22.5° Bends
2	363	513	259	141
2 1/2	531	751	379	207
3	788	1,114	562	307
4	1,302	1,841	928	508
6	2,822	3,980	2,012	1,101
8	4,783	6,763	3,410	1,865
10	7,430	10,506	5,297	2,898
12	10,452	14,778	7,452	4,076

FOR REDUCERS, SUBTRACT SMALL OPENING PLUG THRUST FROM LARGE OPENING PLUG THRUST TO CALCULATE THRUST/100.

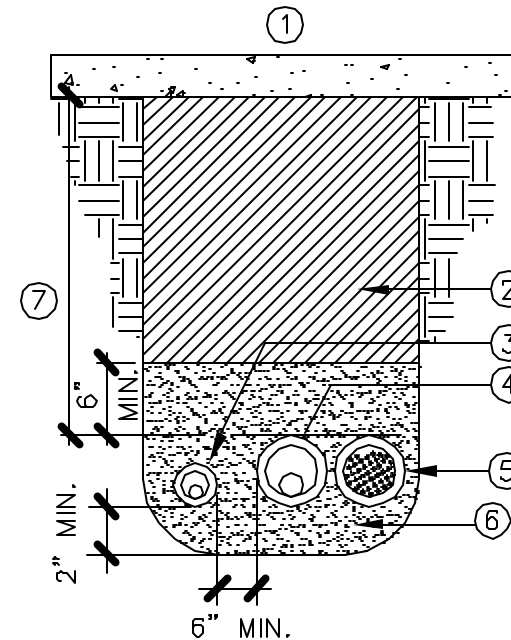
TABLE 2 - SAFE BEARING LOAD

SOIL TYPE	LBS PER SQ. FT.*
Soft Clay	1,000
Sand	2,000
Sand & Gravel	3,000
Sand & Gravel cemented w/Clay	4,000
Hard Pan	10,000

*HARCO ASSUMES NO RESPONSIBILITY FOR THE ABOVE BEARING LOAD DATA. THE ENGINEER IS RESPONSIBLE FOR DETERMINING SAFE BEARING LOADS, AND WHEN DOUBT EXISTS, SOIL BEARING TESTS SHOULD BE SPECIFIED. THE BEARING LOADS GIVEN ARE FOR HORIZONTAL THRUSTS WHEN DEPTH OF COVER EXCEEDS 2 FEET.

C THRUST BLOCKING INSTRUCTIONS

NTS

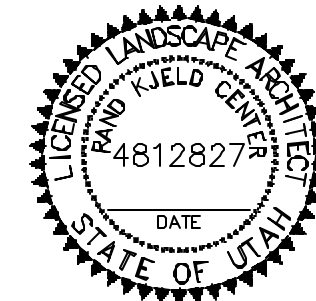


- ① HARDSCAPE SURFACE - SEE CIVIL PLANS
② BACKFILL MATERIAL - SEE NOTES
③ LATERAL LINE W/SLEEVE.
④ PRESSURE MAIN LINE SLEEVE
⑤ CONTROL WIRE SLEEVE (SAME SIZE AS MAIN LINE SLEEVE)
⑥ BEDDING MATERIAL - SEE NOTES
⑦ MINIMUM COVER:
12" UNDER WALKS
18" UNDER STREETS

NOTES:
• SLEEVES 4" AND SMALLER USE PVC SCH. 40 PIPE.
• SLEEVES >4" USE PVC CLASS 200 PIPE
• ALL SLEEVES SHALL BE TWO (2) TIMES LARGER THAN DIAMETER OF PIPE TO BE SLEEVED.
• INSTALL SLEEVES AT A DEPTH TO AVOID CONFLICT WITH OTHER UTILITIES AND MAINS.

F SLEEVING DETAIL

NTS

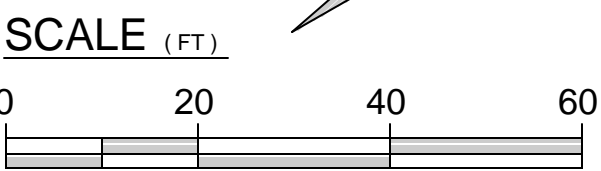
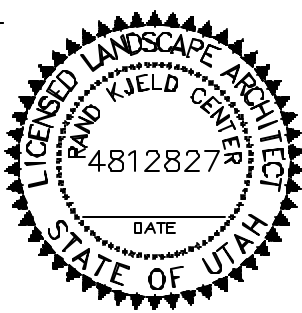
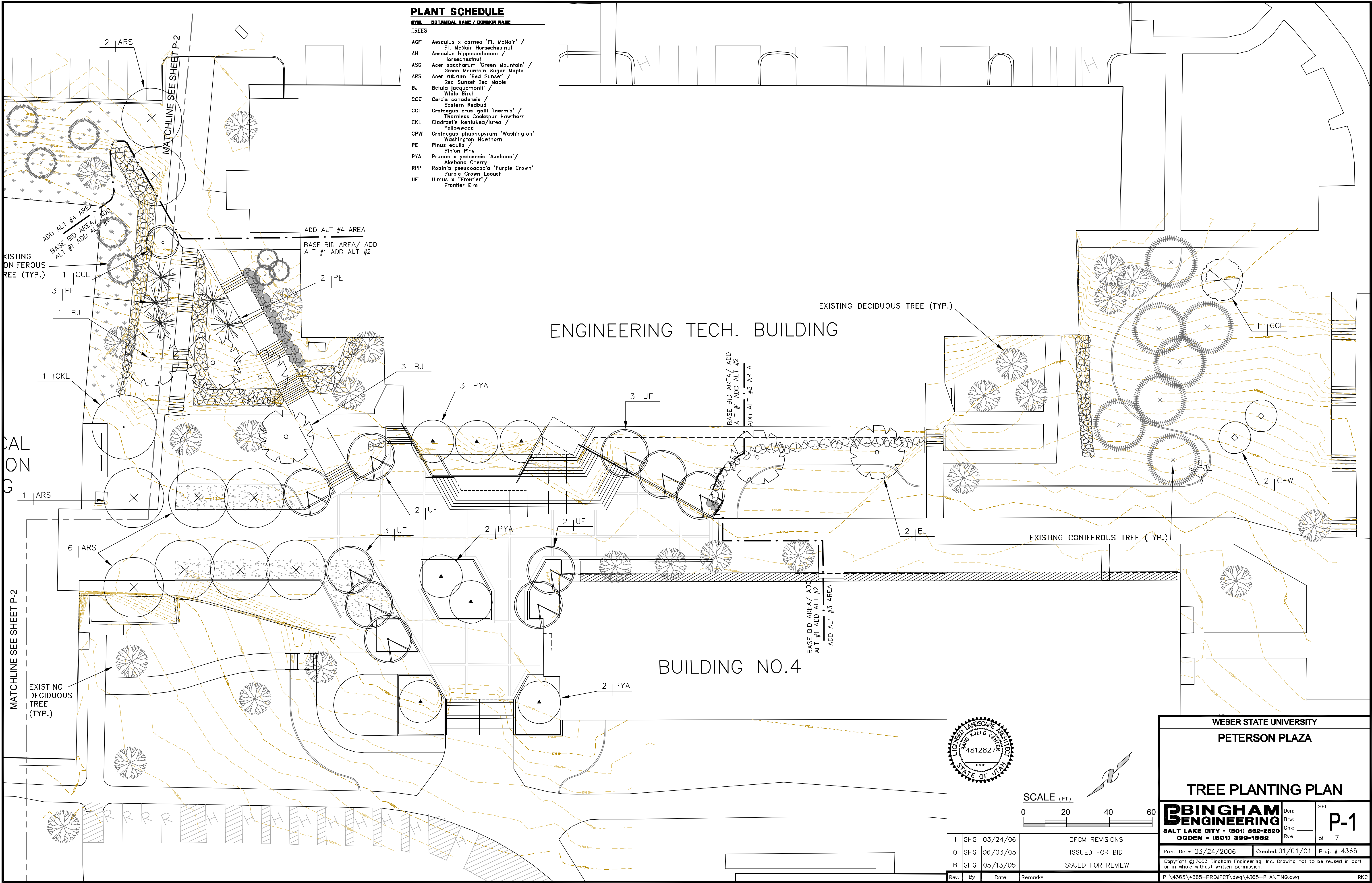


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Rev.	By	Date	Remarks

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PETERSON PLAZA			
IRRIGATION DETAILS			
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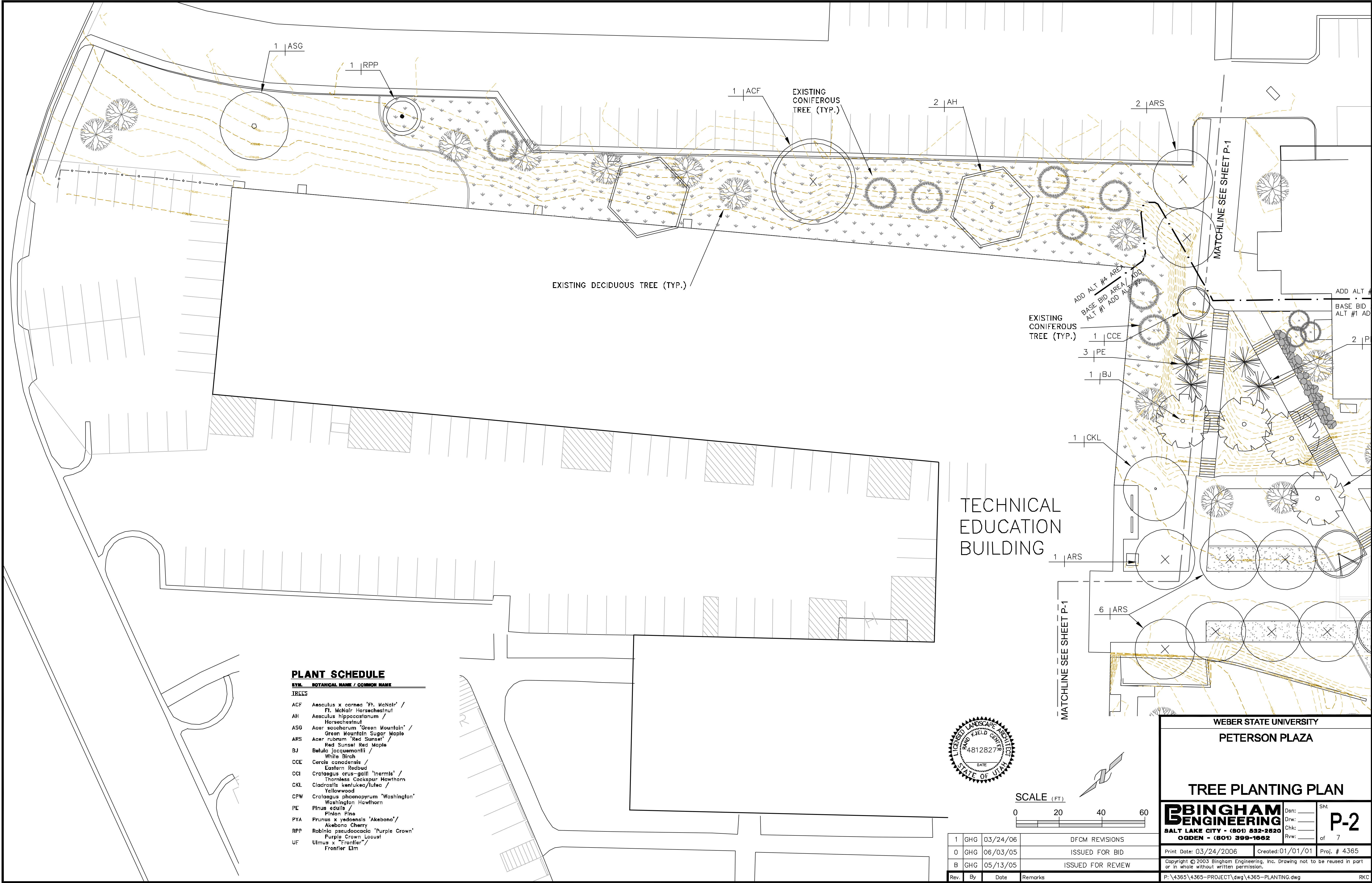
PLANT SCHEDULE

SYMBOL	BOTANICAL NAME / COMMON NAME
TREES	
ACF	Aesculus x carnea 'Fl. McNeil' / Fl. McNeil Horsechestnut
AH	Aesculus hippocastanum / Horsechestnut
ASG	Acer saccharum 'Green Mountain' / Green Mountain Sugar Maple
ARS	Acer rubrum 'Red Sunset' / Red Sunset Red Maple
BJ	Betula jacquemontii / White Birch
CCE	Cercis canadensis / Eastern Redbud
CDI	Crataegus crus-galli 'Inermis' / Thornless Cockspur Hawthorn
CKL	Cladrasia kentukea/lutea / Yellowwood
CPW	Crataegus phaenopyrum 'Washington' / Washington Hawthorn
PE	Pinus edulis / Pinon Pine
PYA	Prunus x yedoensis 'Akebono' / Akebono Cherry
RPP	Robinia pseudoacacia 'Purple Crown' / Purple Crown Locust
UF	Ulmus x 'Frontier' / Frontier Elm



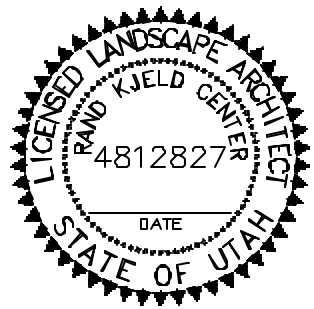
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PETERSON PLAZA	
TREE PLANTING PLAN	
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PLANT SCHEDULE

SYMBOL	BOTANICAL NAME / COMMON NAME
TREES	
ACF	Aesculus x carnea 'Fr. McNair' / Fr. McNair Horsechestnut
AH	Aesculus hippocastanum / Horsechestnut
ASG	Acer saccharum 'Green Mountain' / Green Mountain Sugar Maple
ARS	Acer rubrum 'Red Sunset' / Red Sunset Red Maple
BJ	Belula jacquemontii / White Birch
CCE	Cercis canadensis / Eastern Redbud
CCI	Crataegus crus-galli 'Inermis' / Thornless Cockspur Hawthorn
CKL	Cladrasis kentukea/lutea / Yellowwood
CPW	Crataegus phaenopyrum 'Washington' / Washington Hawthorn
PE	Pinus edulis / Pinion Pine
PYA	Prunus x yedoensis 'Akebono' / Akebono Cherry
RPP	Robinia pseudocacia 'Purple Crown' / Purple Crown Locust
UF	Ulmus x 'Frontier' / Frontier Elm



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TREE PLANTING PLAN

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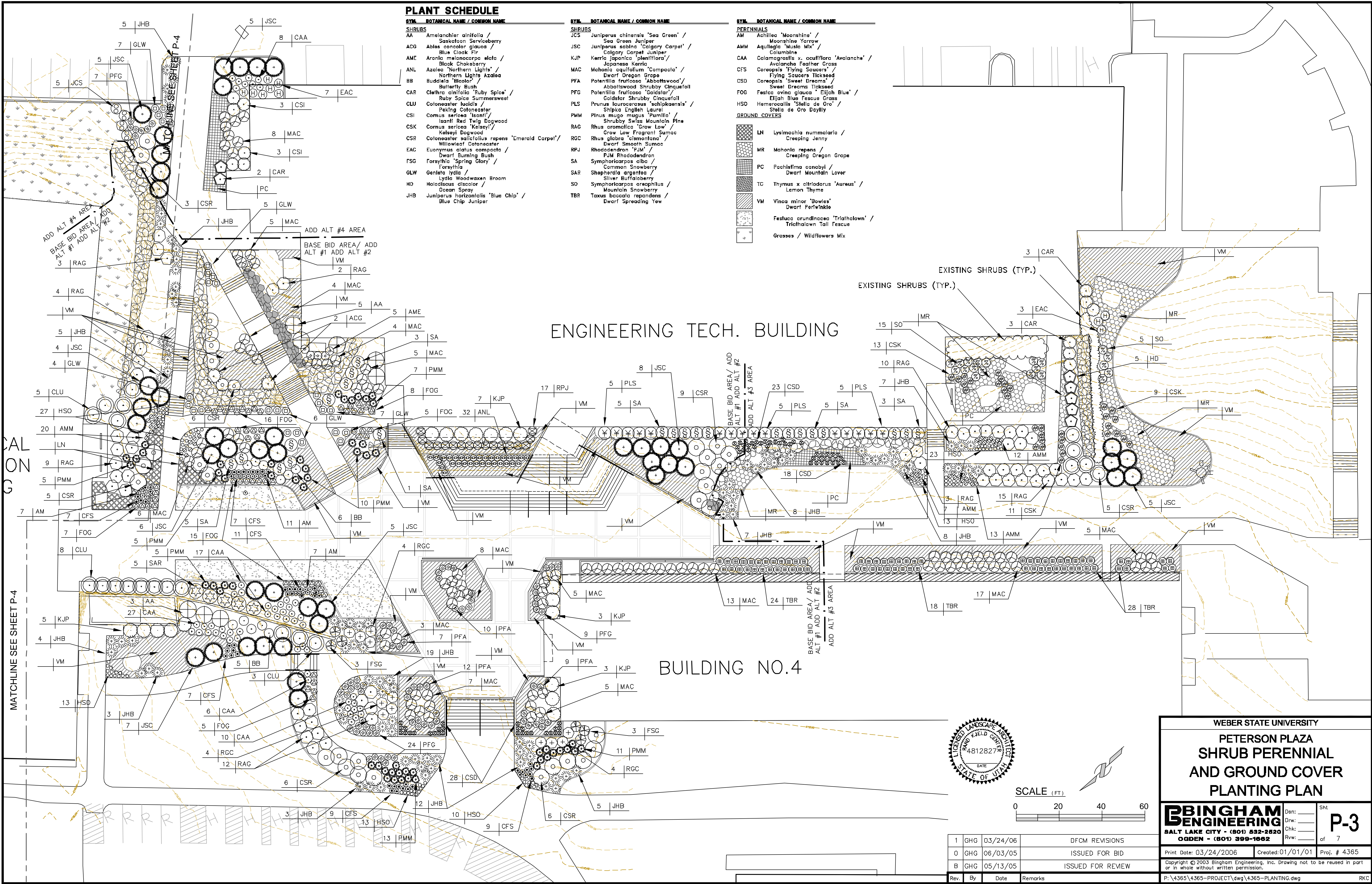
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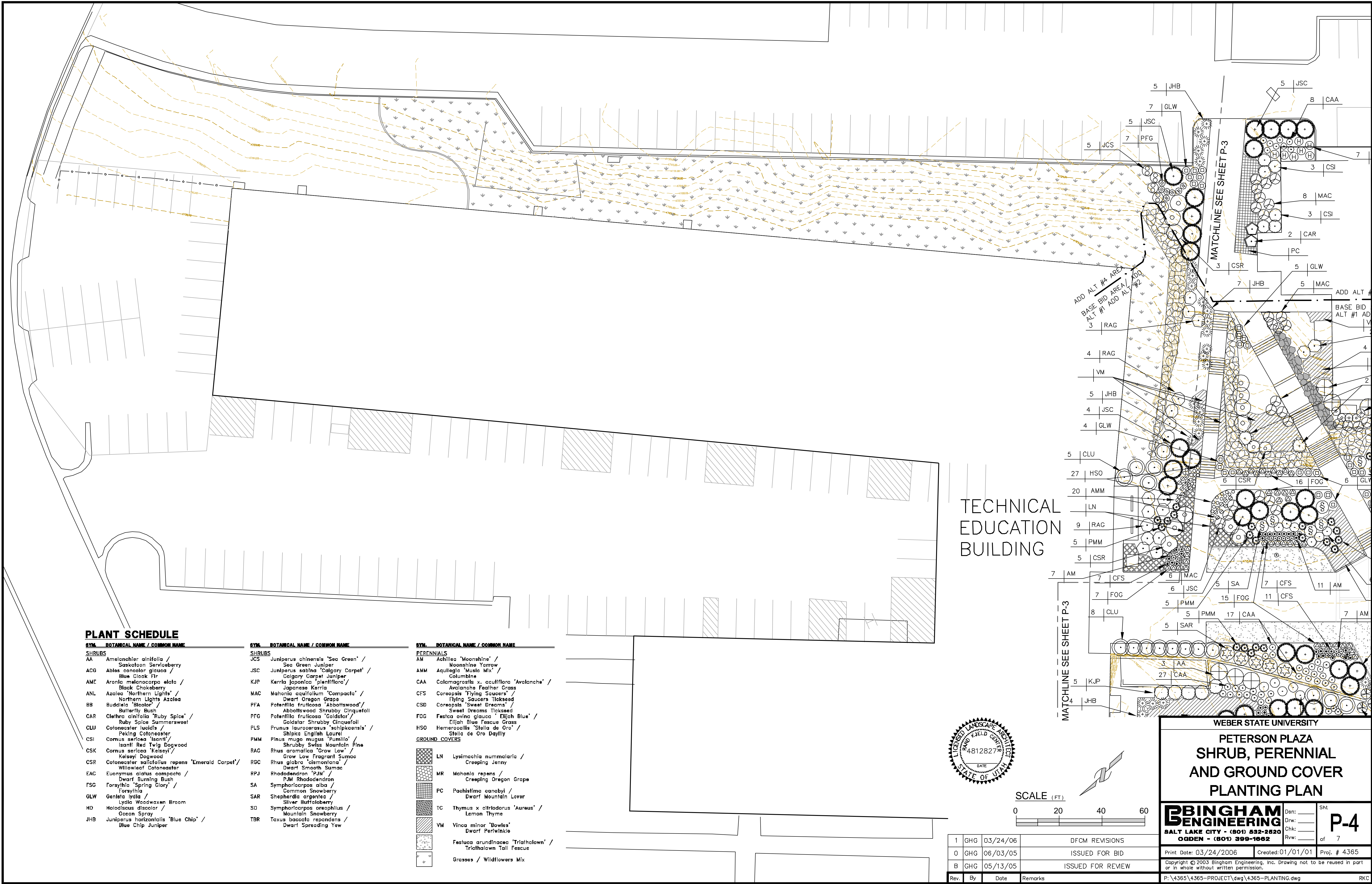
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PLANT SCHEDULE

SYMBOL BOTANICAL NAME / COMMON NAME

SHRUBS

AA	Amelanchier alnifolia / Saskatoon Serviceberry
ADG	Abies concolor glauca / Blue Clock Fir
AME	Aronia melanocarpa elata / Black Chokeberry
ANL	Azalea 'Northern Lights' / Northern Lights Azalea
BB	Buddleia 'Stacolor' / Butterfly Bush
CAR	Clethra alnifolia 'Ruby Spice' / Ruby Spice Summersweet
CLU	Coloneaster lucidus / Peking Cotoneaster
CSI	Cornus sericea 'Isanti' / Isanti Red Twig Dogwood
CSK	Cornus sericea 'Kelsey' / Kelsey Dogwood
CSR	Coloneaster salicifolius repens 'Emerald Carpet' / Willowleaf Cotoneaster
EAC	Euonymus alatus compacta / Dwarf Burning Bush
FSC	Forsythia 'Spring Glory' / Forsythia
GLW	Genista lydia / Lydia Woodwaxen Broom
HD	Halodiscus discolor / Ocean Spray
JHB	Juniperus horizontalis 'Blue Chip' / Blue Chip Juniper

SYMBOL BOTANICAL NAME / COMMON NAME

SHRUBS

JCS	Juniperus chinensis 'Sea Green' / Sea Green Juniper
JSC	Juniperus sabina 'Calgary Carpet' / Calgary Carpet Juniper
KJP	Kerria japonica 'plentiflora' / Japanese Kerria
MAC	Mahonia aquifolium 'Compacta' / Dwarf Oregon Grape
PFA	Potentilla fruticosa 'Abbottwood' / Abbottwood Shrubby Cinquefoil
PFG	Potentilla fruticosa 'Goldstar' / Goldstar Shrubby Cinquefoil
PLS	Prunus laurocerasus 'schipkaensis' / Shloka English Laurel
PMM	Pinus mugo mugo 'Pumilio' / Shrubby Swiss Mountain Pine
RAG	Rhus aromatica 'Crown Low' / Crown Low Fragrant Sumac
RGK	Rhus glabra 'dissecta' / Dwarf Smooth Sumac
RPJ	Rhododendron 'PJM' / PJM Rhododendron
SA	Symphoricarpos alba / Common Snowberry
SAR	Shepherdia argentea / Silver Buffaloberry
SO	Symphoricarpos oreophilus / Mountain Snowberry
TBR	Taxus baccata repandens / Dwarf Spreading Yew

SYMBOL BOTANICAL NAME / COMMON NAME

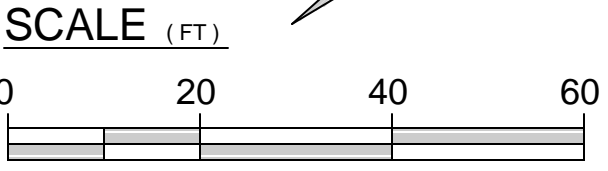
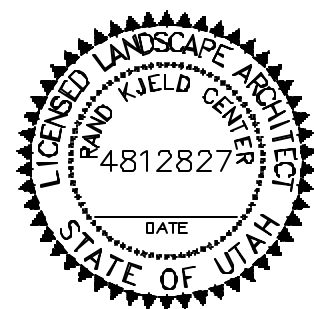
PERENNIALS

AM	Achillea 'Moonshine' / Moonshine Yarrow
AMM	Aquilegia 'Muscle Mix' / Columbine
CAA	Calamagrostis x. acutiflora 'Avalanche' / Avalanche Feather Grass
CFS	Coreopsis 'Flying Saucers' / Flying Saucers Tickseed
CSD	Coreopsis 'Sweet Dreams' / Sweet Dreams Tickseed
FOG	Festuca ovina glauca 'Elijah Blue' / Elijah Blue Fescue Grass
HSO	Hemerocallis 'Stella de Oro' / Stella de Oro Daylily

GROUND COVERS

LN	Lysimachia nummularia / Creeping Jenny
MR	Mahonia repens / Creeping Oregon Grape
PC	Pachistima canabii / Dwarf Mountain Lover
TC	Thymus x citriodorus 'Aureus' / Lemon Thyme
VM	Vinca minor 'Bowles' / Dwarf Periwinkle
	Festuca arundinacea 'Triathalown' / Triathalown Tall Fescue
	Grasses / Wildflowers Mix

TECHNICAL
EDUCATION
BUILDING



WEBER STATE UNIVERSITY

PETERSON PLAZA
SHRUB, PERENNIAL
AND GROUND COVER
PLANTING PLAN

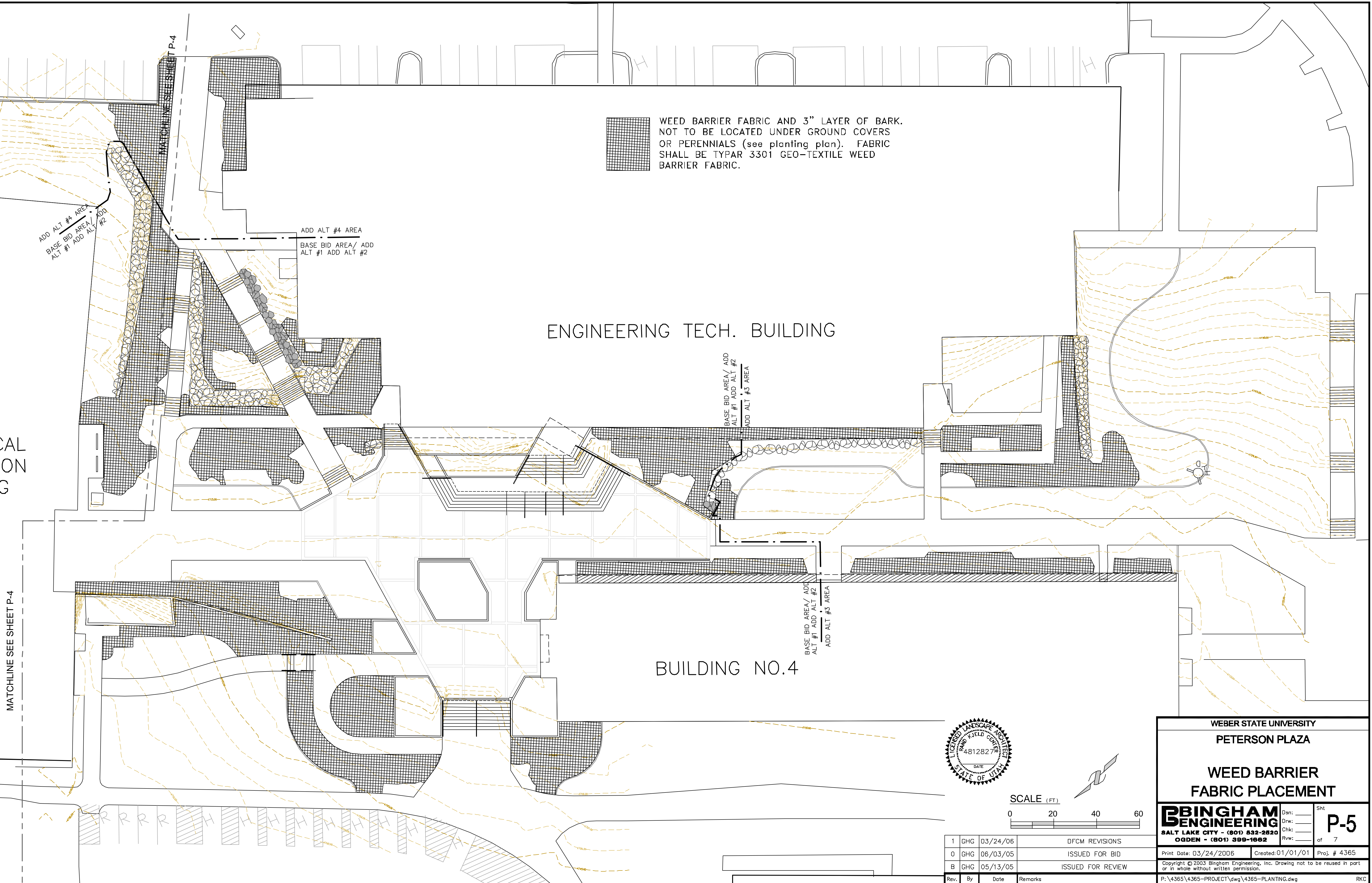
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LOCATION

MATCHLINE SEE SHEET P.4

MATCHLINE SEE SHEET P.4

ADD ALT #4 AREA
BASE BID AREA/ ADD
ALT #1 ADD ALT #2

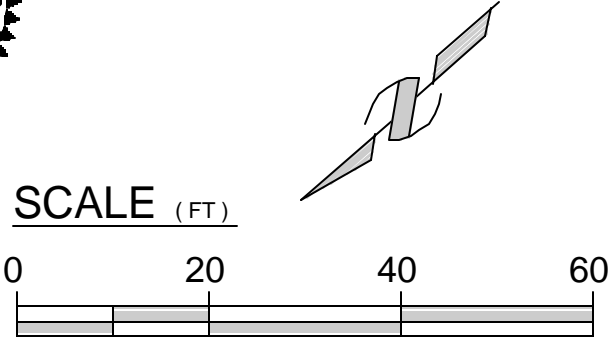
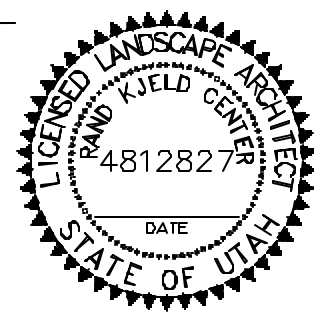
ADD ALT #4 AREA
BASE BID AREA/ ADD
ALT #1 ADD ALT #2

BASE BID AREA/ ADD
ALT #1 ADD ALT #2
ADD ALT #3 AREA

BASE BID AREA/ ADD
ALT #1 ADD ALT #2
ADD ALT #3 AREA

ENGINEERING TECH. BUILDING

BUILDING NO.4



1	GHG	03/24/06	DFCM REVISIONS
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Rev.	By	Date	Remarks

WEBER STATE UNIVERSITY
PETERSON PLAZA

WEED BARRIER
FABRIC PLACEMENT

B BINGHAM
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SALT LAKE CITY - (801) 532-2620
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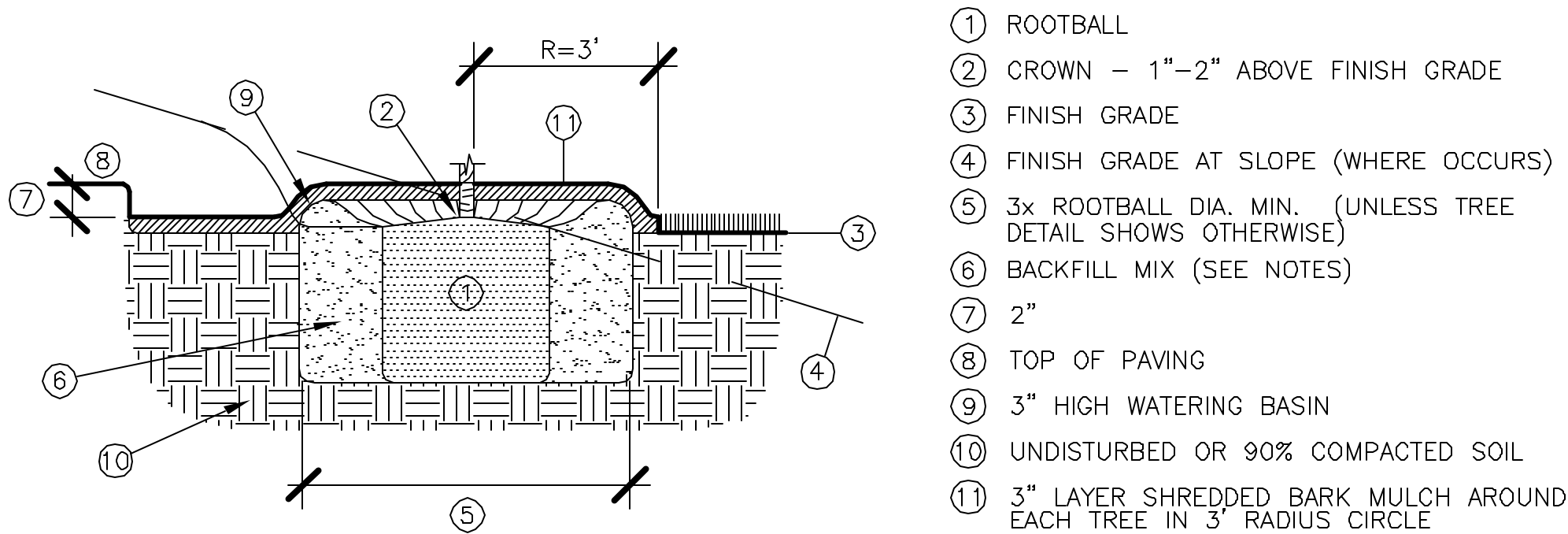
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PETERSON PLAZA PLANT SCHEDULE

SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
ACF	1	Aesculus x carnea 'Ft. McNair'	Ft. McNair Horsechestnut	2" Cal.	Well Formed Speciman.
AH	2	Aesculus hippocastanum	Horsechestnut	2" Cal.	Well Formed Speciman.
ARS	9	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2" Cal.	Well Matched.
ASG	1	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	2" Cal.	Well Formed Speciman.
BJ	6	Betula jacquemontii	White Birch	2" Cal.	Well Formed Speciman.
CCE	1	Cercis canadensis	Eastern Redbud	2" Cal.	Well Formed Speciman.
CCI	1	Crataegus crus-galli 'inermis'	Thornless Cockspur Hawthorn	2" Cal.	
CLU	1	Cladrastis kentukea/lutea	Yellowwood	2" Cal.	Well Formed Speciman.
CPW	2	Crataegus phaenopyrum 'Washington'	Washington Hawthorn	2" Cal.	
PE	5	Pinus edulis	Pinion Pine	6' Height	
PYA	7	Prunus x yedoensis 'Akebono'	Akebono Cherry	2" Cal.	Well Matched.
RPP	1	Robinia pseudoacacia 'Purple Crown'	Purple Crown Locust	2" Cal.	Well Formed Speciman.
UF	10	Ulmus x 'Frontier'	Frontier Elm	2" Cal.	Well Matched.
SHRUBS					
AA	8	Amelanchier alnifolia	Saskatoon Serviceberry	5 Gal.	
ACG	2	Abies concolor glauca	Blue Cloak Fir	5 Gal.	
AME	5	Aronia melanocarpa elata Black	Black Chokeberry	5 Gal.	
ANL	32	Azalea 'Northern Lights'	Northern Lights Azalea	5 Gal.	
BB	11	Buddleia 'Bicolor'	Butterfly Bush	5 Gal.	
CAR	8	Clethra alnifolia 'Ruby Spice'	Ruby Spice Summersweet	5 Gal.	
CLU	16	Cotoneaster lucidis	Peking Cotoneaster	5 Gal.	
CSI	6	Cornus sericea 'Isanti'	Isanti Red Twig Dogwood	5 Gal.	
CSK	33	Cornus sericea 'Kelseyi'	Kelseyi Dogwood	5 Gal.	
CSR	40	Cotoneaster salicifolius repens 'Emerald Carpet'	Willowleaf Cotoneaster	5 Gal.	
EAC	10	Euonymus alatus compacta	Dwarf Burning Bush	5 Gal.	
FSG	6	Forsythia 'Spring Glory'	Forsythia	5 Gal.	
GLW	29	Genista lydia	Lydia Woodwaxen Broom	5 Gal.	
HD	5	Holodiscus discolor	Ocean Spray	5 Gal.	
JHB	89	Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper	5 Gal.	
JCS	11	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 Gal.	
JSC	39	Juniperus sabina 'Calgary Carpet'	Calgary Carpet Juniper	5 Gal.	
KJP	18	Kerria japonia 'plentiflora'	Japanese Kerria	5 Gal.	
MAC	95	Mahonia aquifolium 'Compacta'	Dwarf Oregon Grape	5 Gal.	
PFA	36	Potentilla fruticosa 'Abbottswood'	Abbottswood Shrubby Cinquefoil	2 Gal.	
PFG	40	Potentilla fruticosa 'Goldstar'	Goldstar Shrubby Cinquefoil	2 Gal.	
PLS	15	Prunus laurocerasus 'schipkaensis'	Shipka English Laurel	5 Gal.	
PMM	56	Pinus mugo mugus 'Pumilio'	Shrubby Swiss Mountain Pine	5 Gal.	
RAG	58	Rhus aromatica 'Grow Low'	Grow Low Fragrant Sumac	5 Gal.	
RGC	12	Rhus glabra 'cismontana'	Dwarf Smooth Sumac	5 Gal.	
RPJ	17	Rhododendron PJM	PJM Rhododendron	5 Gal.	
SA	22	Symphoricarpos alba	Common Snowberry	5 Gal.	
SAR	5	Shepherdia argentea	Silver Buffaloberry	5 Gal.	
SO	20	Symphoricarpos oreophilus	Mountain Snowberry	5 Gal.	
TBR	70	Taxus baccata repandens	Dwarf Spreading Yew	5 Gal.	
PERENNIALS					
AM	25	Achillea 'Moonshine'	Moonshine Yarrow	1 Gal.	
AMM	52	Aquilegia 'Music Mix'	Columbine	1 Gal.	
CAA	54	Calamagrostis x acutifolia 'Avalanche'	Avalanche Feather Grass	1 Gal.	
CFS	50	Coreopsis 'Flying Saucers'	Flying Saucers Tickseed	1 Gal.	
CSD	69	Coreopsis 'Sweet Dreams'	Sweet Dreams Tickseed	1 Gal.	
FOG	56	Festuca ovina glauca 'Elijah Blue'	Elijah Blue Fescue Grass	1 Gal.	
HSO	86	Hemerocallis 'Stella de Oro'	Stella de Oro Daylily	1 Gal.	



A TREE/SHRUB PLANTING DETAIL

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SYM.	BOTANICAL NAME	COMMON NAME	(QTY) SIZE	REMARKS
GROUND COVERS				
	Lysimachia nummularia	Creeping Jenny	(11) F/36	Plant @ 12" spacing (±387 SF)
	Mahonia repens	Creeping Oregon Grape	(30) F/36	Plant @ 18" spacing (±1,606 SF)
	Pachistima canabii	Dwarf Mountain Lover	(9) F/36	Plant @ 18" spacing (±446 SF)
	Vinca minor 'Bowles'	Dwarf Periwinkle	(162) F/36	Plant @ 12" spacing (±5,850 SF)
	Festuca arundinacea 'Triathalown'	Triathalawn Tall Fescue	2,035 SF	Hydroseed
	Grasses/Wildflower Mix (See Below)		15,058 SF	Hydroseed

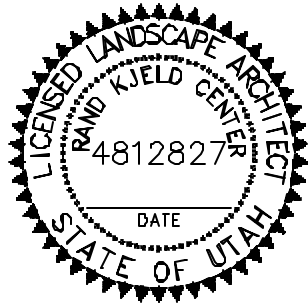
GRASSES/WILDFLOWER MIX

BOTANICAL NAME	COMMON NAME	PERCENT
GRASSES		
Elymus lanceolatus ssp. dasystachyum	Thickspike Wheatgrass	20.0%
Festuca ovina MX-86	Sheep Fescue	7.5%
Poa sandbergii	Sandberg Bluegrass	5.0%
Bouteloua gracilis	Blue Grama	5.0%
WILDFLOWERS		
Gaillardia aristata	Blanket Flower	22.5%
Eschscholzia californica	California Poppy	15.0%
Linum lewisii	Blue Flax	15.0%
Coreopsis lanceolata	Lance-leaved Coreopsis	10.0%

SEED MIXES AVAILABLE THROUGH:

GRANITE SEED
1597 WEST 2100 NORTH
LEHI, UTAH 84043
(801)768-4422 LEHI
(801)531-1456 SALT LAKE
(801)768-3967 FAX

100.0% HYDROSEEDED @ 1 LB/1,000 FT



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1	GHG	03/24/06	DFCM REVISIONS
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B	GHG	05/13/05	ISSUED FOR REVIEW
Rev.	By	Date	Remarks

PLANTING NOTES

1. THE PLANTING PLAN IS DIAGRAMMATIC, AND ALL PLANT LOCATIONS ARE APPROXIMATE.

A. PLANT SYMBOLS TAKE PRECEDENCE OVER PLANT QUANTITIES SPECIFIED ON PLANS.

B. CONTRACTOR SHALL VERIFY PLANT QUANTITIES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN QUANTITIES AND SYMBOLS SHOWN.

2. PRIOR TO PLANTING, THE IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL AND ALL PLANTING AREAS SHALL BE THOROUGHLY MOISTENED.

3. LANDSCAPE CONTRACTOR SHALL APPLY A CONTACT HERBICIDE TO ALL PLANTING AREAS WHERE WEEDS OR UNDESIRABLE VEGETATION ARE PRESENT PER MANUFACTURERS SPECIFICATIONS A MINIMUM OF TEN (10) DAYS PRIOR TO COMMENCEMENT OF ANY PLANTING OR IRRIGATION WORK. WEEDS SHALL BE ALLOWED TO COMPLETELY DIE BACK, INCLUDING THE ROOTS, BEFORE PROCEEDING WITH WORK. DEAD WEEDS SHALL BE REMOVED FROM THE SITE.

4. ALL PLANTING AREAS SHALL RECEIVE A MINIMUM OF FOUR (4) INCHES OF IMPORTED TOPSOIL IN LAWN AREAS AND TWELVE (12) INCHES IN PLANTING BEDS. ALL TOPSOIL USED ON THIS PROJECT SHALL MEET THE FOLLOWING CRITERIA:

A. pH: 5.5 – 8.0

B. EC (ELECTRICAL CONDUCTIVITY): <2.0 mmhos PER CENTIMETER

C. SAR (SODIUM ABSORPTION RATIO): <3.0

D. %OM (PERCENT ORGANIC MATTER): >1%

E. TEXTURE (PARTICLE SIZE PER USDA SOIL CLASSIFICATION):

SAND: <70%

CLAY: <30%

SILT: = BALANCE

F. STONE FRAGMENTS (GRAVELS OR ANY SOIL PARTICLE GREATER THAN 2 MM IN SIZE): <5% (BY VOLUME)

IN ADDITION, THE SOIL SHALL BE FERTILE, FRIABLE, NATURAL LOAM AND SHALL BE CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHALL BE FREE OF STONES, LUMPS, CLOUDS OF HARD EARTH, PLANTS OR THEIR ROOTS, STICKS AND OTHER EXTRANEOUS MATTER. THE SOIL SHALL CONTAIN NO NOXIOUS WEEDS NOR THEIR SEEDS. IT SHALL NOT BE USED FOR PLANTING OPERATIONS WHILE IN A FROZEN OR MUDDY CONDITION.

5. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL ANALYSIS FROM ANY AUTHORIZED SOIL TESTING AGENCY OF ANY EXISTING STOCKPILED OR IMPORTED TOP SOIL TO BE USED ON THE PROJECT TO VERIFY ITS CONFORMANCE TO THE ABOVE SPECIFIED CRITERIA. TEST RESULTS SHALL INCLUDE HORTICULTURAL RECOMMENDATIONS. SOIL SAMPLES SHALL BE OBTAINED PER TESTING AGENCY DIRECTIONS. ALLOW TEN (10) WORKING DAYS TO OBTAIN RESULTS OF SOIL TESTS. COSTS FOR SUCH TESTING SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.

6. PRIOR TO DELIVERY OF IMPORTED TOPSOIL TO THE SITE, THE LANDSCAPE CONTRACTOR SHALL PROVIDE TO THE OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) THE NAME AND LOCATION OF THE TOPSOIL SOURCE, ALONG WITH THE CERTIFIED SOIL ANALYSIS OF THE TOPSOIL TO BE USED. THE ANALYSIS SHALL VERIFY THAT THE PROPOSED TOPSOIL MEETS THE ABOVE OUTLINED CRITERIA, AND IS CAPABLE OF SUPPORTING HEALTHY PLANT GROWTH.

7. THE FOLLOWING PROCEDURES SHALL BE FOLLOWED IN PLACING ALL TOPSOIL:

A. ALL AREAS TO BE PLANTED WHICH HAVE A SLOPE OF LESS THAN 10% SHALL BE CROSS-RIPPED TO A DEPTH OF FOUR (4) TO SIX (6) INCHES.

B. SUBGRADE MATERIAL SHALL BE ROUGH GRADED TO PLUS OR MINUS 0.1 FEET OF A FINAL ROUGH GRADE WHICH WILL ALLOW THE CONTRACTOR TO ACHIEVE FINAL FINISH GRADE THROUGH THE INSTALLATION OF IMPORTED TOPSOIL.

C. SCARIFY SURFACE OF SUBGRADE TO A TWO (2) INCH DEPTH TO PROVIDE TRANSITION ZONE BETWEEN SUBGRADE AND TOPSOIL. PLACE TOPSOIL ON SUBGRADE AND FINE GRADE TO FINAL FINISH GRADE AND TOPSOIL DEPTHS AS INDICATED ON THE DRAWINGS AND IN THESE NOTES.

D. THE FOLLOWING AMENDMENTS SHALL BE APPLIED TO THE SURFACE AND RAKED INTO THE SOIL DURING FINE GRADING PROCEDURES:

1. 16-16-16 SLOW RELEASE FERTILIZER CONTAINING TRACE ELEMENTS AT A RATE OF 1 POUND OF NITROGEN PER 1000 SF (6.25 POUNDS OF FERTILIZER).

8. LANDSCAPE CONTRACTOR SHALL MAINTAIN A MINIMUM 2% DRAINAGE AWAY FROM ALL BUILDINGS, STRUCTURES, AND WALLS. FINISHED GRADES SHALL BE SMOOTHED TO ELIMINATE PUDDLING OR STANDING WATER.

9. ALL FINISHED GRADES SHALL BE APPROVED BY THE OWNER/OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION OF ANY PLANT MATERIALS.

10. CONTRACTOR SHALL HAVE THE LANDSCAPE ARCHITECT APPROVE PLANT MATERIAL SIZE AND QUALITY PRIOR TO INSTALLATION. ANY PLANTS WHICH ARE NOT TRUE TO FORM, APPEAR STRESSED OR UNHEALTHY, INFESTED WITH PESTS, OR UNDERSIZED FOR THEIR CONTAINERS SHALL BE REJECTED.

11. PLANT MATERIAL SHALL NOT BE ROOT BOUND. FIVE (5) GALLON PLANTS AND LARGER SHALL HAVE BEEN GROWN IN CONTAINERS FOR A MINIMUM OF SIX (6) MONTHS UP TO A MAXIMUM OF TWO (2) YEARS. PLANTS SHALL EXHIBIT HEALTHY GROWTH AND BE FREE OF DISEASES AND PESTS.

12. CONTRACTOR SHALL SPOT THE LOCATIONS OF ALL PLANTS FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

13. PLANTS SHALL NOT BE PLACED WITHIN TWELVE (12) INCHES OF SPRINKLER HEADS.

14. PLANT BACKFILL MIX SHALL BE 50% NATIVE SITE SOIL AND 50% TOPSOIL UNLESS OTHERWISE SPECIFIED.

15. TYPAR GEOTEXTILE FABRIC SHALL BE PLACED IN ALL SHRUB BEDS (EXCLUDING UNDER PERENNIAL PLANTS (DAYLILY, VINCA, CONE FLOWER, SHASTA DAISY, BLANKET FLOWER, AND HOSTA) AND UNDER PEA GRAVEL. FABRIC SHALL BE PLACED DIRECTLY ON THE TOP OF THE TOPSOIL AND SECURELY ANCHORED PER MANUFACTURER'S RECOMMENDATIONS. ALL CORNERS AND SEAMS SHALL BE TUCKED INTO TOPSOIL AND SECURLY ANCHORED. IRRIGATION HEADS MAY PENETRATE THE FABRIC AS REQUIRED TO FUNCTION PROPERLY. COVER WITH A THREE (3) INCH LAYER OF SHREDDED BARK MULCH. HOLES IN THE FABRIC SHALL ONLY BE ALLOWED FOR PASSAGE OF IRRIGATION MATERIALS AND PLANTS. NO FABRIC SHALL BE VISIBLE IN ANY LOCATION.

16. PLANTING PROCEDURES FOR ALL PLANT MATERIALS, ESPECIALLY TREES, SHALL BE AS FOLLOWS:

A. DIG PLANTING HOLE THREE (3) TIMES THE WIDTH OF THE ROOT BALL, AND ONE TO TWO (1-2) INCHES SHALLOWER THAN THE ROOT BALL DEPTH. SIDES OF HOLE SHOULD BE ROUGHENED AND NOT SMOOTH OR SCULPTED.

B. FOR CONTAINER PLANTS, REMOVE CONTAINER AND PLACE ROOT BALL IN CENTER OF HOLE, WITH ROOT BALL RESTING ON UNDISTURBED SOIL. ROOT CROWN OR COLLAR SHALL BE AT OR JUST ABOVE FINISHED GRADE.

C. FOR BALLED AND BURLAPPED PLANTS, PLACE ROOT BALL IN CENTER OF HOLE AND RESTING ON UNDISTURBED GROUND. CUT AND REMOVE WIRE BASKET AND BURLAP OR OTHER WRAPPING MATERIAL FROM ROOT BALL. THIS MAY BE DONE WITH ROOT BALL IN HOLE. BURLAP OR WIRE PIECES UNDERNEATH THE ROOT BALL MAY BE LEFT IF THEY CANNOT BE REMOVED. DO NOT FOLD BURLAP OVER, BUT CUT AWAY AS MUCH AS POSSIBLE WITHOUT DISTURBING ROOT BALL. BACKFILL BOTTOM THIRD (1/3) OF HOLE AS WIRE AND BURLAP ARE REMOVED.

D. BACKFILL WITH SPECIFIED SOIL MIX, FILLING HOLE TO TWO THIRDS (2/3) CAPACITY.

E. THOROUGHLY WATER PLANT, THEN COMPLETE BACKFILLING THE HOLE. FORM A WATERING BASIN AROUND THE PLANT AND THOROUGHLY WATER AGAIN.

F. MONITOR ALL PLANTS TO INSURE THAT NO SETTLING OCCURS.

17. AFTER PLANTING, THE FOLLOWING OPERATIONS SHALL BE PERFORMED:

A. STAKE AND MULCH ALL TREES PER INSTALLATION DETAILS.

B. REMOVE NURSERY STAKES AND TIES FROM ALL CONTAINER STOCK. MAINTAIN SIDE GROWTH ON ALL TREES. PRUNE AND REMOVE ANY DEAD, DAMAGED OR BROKEN BRANCHES.

18. ALL PLANTERS ARE TO RECEIVE A THREE (3) INCH TOP DRESSING OF WOOD FIBER MULCH. JUST PRIOR TO PLACEMENT OF MULCH, TREAT AREAS WITH PRE-EMERGENT HERBICIDE ACCORDING TO MANUFACTURERS RECOMMENDATIONS.

19. THE LANDSCAPE CONTRACTOR SHALL LEAVE SITE IN A CLEAN CONDITION, REMOVING ALL UNUSED MATERIAL, TRASH AND TOOLS.

20. AT SUBSTANTIAL COMPLETION OF ALL WORK OUTLINED IN THESE PLANS, THE LANDSCAPE CONTRACTOR SHALL CONTACT OWNER AND ARRANGE FOR A WALK THROUGH. SUBSTANTIAL COMPLETION SHALL BE DEFINED AS COMPLETION OF ALL WORK OUTLINED IN THE PLANS AND SPECIFICATINS WITH THE EXCEPTION OF FINAL CLEAN UP AND DEMOBILIZATION. WORK MUST BE FULLY COMPLETED ACCORDING TO ALL PLANS, NOTES, AND SPECIFICATIONS AND EXHIBIT PROFESSIONAL WORKMANSHIP. A MAINTENANCE PERIOD WILL BEGIN ON THE DATE OF ACCEPTANCE OF SUBSTANTIAL COMPLETION BY OWNER.

21. LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTINGS UNTIL TURF IS FULLY ESTABLISHED. TURF SHALL BE CONSIDERED FULLY ESTABLISHED WHEN GRASS STANDS COME IN UNIFORM AND THICK, WITH NO BARE OR THIN SPOTS, AND ROOTS HAVE BEGUN TO SPREAD AND KNIT TOGETHER. NO WEEDS SHALL BE ALLOWED IN THE GRASS. THIS SHALL BE A MINIMUM PERIOD OF SIXTY (60) DAYS. THE MAINTENANCE WORK REQUIRED SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

A. DAILY WATERING OF ALL PLANT MATERIAL.

B. WEEDING AND REMOVAL OF ALL WEEDS FROM GROUND COVER AND PLANTING AREAS.

C. REPLACEMENT OF ANY DEAD, DYING, OR DAMAGED TREES, SHRUBS OR GROUND COVER.

D. FILLING AND REPLANTING OF ANY LOW AREAS WHICH MAY CAUSE STANDING WATER.

E. ADJUSTING OF SPRINKLER HEAD HEIGHTS AND WATERING PATTERNS.

F. FILLING AND RECOMPACTION OF ERODED AREAS, ALONG WITH ANY REQUIRED RE-SEEDING AND/OR RE-PLANTING.

G. GRASS SHALL BE MOWED WHEN BLADES REACH THREE (3) INCHES TALL. NO MORE THAN ONE THIRD (1/3) OF THE BLADE SHALL BE REMOVED PER CUTTING. CUTTING FREQUENCY SHALL BE ONCE EVERY FIVE (5) TO SEVEN (7) DAYS.

H. WEEKLY REMOVAL OF ALL TRASH, LITTER, CLIPPINGS AND ALL FOREIGN DEBRIS.

I. AT 30 DAYS AFTER PLANTING, A BALANCED FERTILIZER 16-16-16 SHALL BE APPLIED TO GRASS AREAS AT A RATE OF ONE HALF (½) POUND OF NITROGEN PER 1000 SQUARE FEET.

J. AT INTERVALS OF THIRTY (30) DAYS AFTER FIRST APPLICATION OF FERTILIZER TO GRASS, APPLY A BALANCED FERTILIZER 16-16-16 AT A RATE OF ONE HALF (½) POUND OF NITROGEN PER 1000 SQUARE FEET UNTIL GRASS IS ESTABLISHED.

22. PRIOR TO END OF MAINTENANCE PERIOD, LANDSCAPE CONTRACTOR SHALL CONTACT OWNER AND ARRANGE FOR A FINAL WALK THROUGH BEFORE FINAL ACCEPTANCE. OWNER MUST ACCEPT ALL MAINTAINED AREAS IN WRITING PRIOR TO END OF MAINTENANCE PERIOD.

23. LANDSCAPE CONTRACTOR SHALL GUARANTEE PLANT MATERIALS AS FOLLOWS:

A. ALL SHRUBS AND GROUND COVERS SHALL BE GUARANTEED BY THE CONTRACTOR AS TO GROWTH AND HEALTH FOR A PERIOD OF SIXTY (60) DAYS AFTER COMPLETION OF THE MAINTENANCE PERIOD AND FINAL ACCEPTANCE. ALL TREES SHALL BE GUARANTEED BY THE CONTRACTOR TO LIVE AND GROW IN AN ACCEPTABLE UPRIGHT POSITION FOR A PERIOD OF ONE (1) YEAR AFTER COMPLETION OF THE SPECIFIED MAINTENANCE PERIOD AND FINAL ACCEPTANCE.

B. THE ONLY CONDITIONS WHICH RELIEVE THE CONTRACTOR FROM THE GUARANTEE OF PLANT MATERIALS AS DESCRIBED ABOVE ARE THOSE WHICH CAN BE SHOWN ARE A DIRECT RESULT OF IMPROPER CARE OR WATERING BY THE OWNER AFTER THE MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD.

C. THE CONTRACTOR, WITHIN FIFTEEN (15) DAYS AFTER RECEIVING WRITTEN NOTIFICATION BY THE ARCHITECT, SHALL REMOVE AND REPLACE ALL GUARANTEED PLANT MATERIALS WHICH FAIL TO MEET THE REQUIREMENTS OF THE GUARANTEE. REPLACEMENT SHALL BE MADE WITH PLANT MATERIALS AS INDICATED OR SPECIFIED ON THE ORIGINAL PLANS, AND ALL SUCH REPLACEMENT MATERIALS SHALL BE GUARANTEED AS SPECIFIED FOR THE ORIGINAL MATERIALS.

SOD INSTALLATION

1. SOD SHALL MEET THE FOLLOWING REQUIREMENTS:

A. SOD SHALL BE OBTAINED FROM APPROVED SOURCES. THE SOD SHALL HAVE BEEN MOWED REGULARLY AND CAREFULLY MAINTAINED FROM PLANTING TO HARVEST.

B. THE SOD SHALL BE FREE OF GRASSY AND BROAD LEAF WEEDS AND BARE OR BURNED SPOTS, CLEAN AND STRONGLY ROOTED, AND OF THE VARIETIES NOTED ON THE PLANS AND NOTES.

C. THE SOD SHALL BE CUT USING APPROVED METHODS, IN PIECES NOT EXCEEDING 1 SQUARE YARD, WITH MINIMUM ONE HALF (1/2) INCH AND MAXIMUM ONE (1) INCH THICKNESS.

D. LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF THE SOURCE OF THE SOD PRIOR TO PLACEMENT. THE SOD SHALL BE STRIPPED AND DELIVERED TO THE SITE NOT MORE THAN 24 HOURS PRIOR TO LAYING. THE SOD SHALL BE MAINTAINED AS MOIST AND IN GOOD CONDITION TO ENCOURAGE IMMEDIATE GROWTH.

E. THE FOLLOWING PROCEDURE SHALL BE FOLLOWED IN INSTALLING SOD:

1. LAY THE SOD ON SMOOTH, MOIST TOPSOIL, WORKING OFF PLANKS IF REQUIRED.

2. RAKE TOPSOIL TO LOOSEN AND LEVEL PRIOR TO PLACING EACH COURSE OF SOD.

3. LAY STRIPS PERPENDICULAR TO DIRECTION OF SLOPE. STRIPS SHALL BE PARALLEL TO EACH OTHER, THEIR END SEAMS STAGGERED. SOD SHALL NOT BE STRETCHED OR OVERLAPPED AND ALL JOINTS SHALL BE BUTTED TIGHT.

4. ROLL SOD IMMEDIATELY AFTER PLACING AND THOROUGHLY WATER WITH A FINE SPRAY TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE NEW SOD AND SOIL IMMEDIATELY BELOW THE SOD ARE THROUGHLY WET.

5. ON SLOPES 3 HORIZONTAL TO 1 VERTICAL AND STEEPER, LAY SOD PERPENDICULAR TO SLOPE AND SECURE EVERY ROW WITH WOODEN PEGS AT 2 FEET MAXIMUM ON CENTER. DRIVE PEGS FLUSH WITH SOIL PORTION OF SOD.

HYDROSEED NOTES

1. HYDROSEED WILL CONFORM TO THE FOLLOWING:

A. WOOD FIBER MULCH SHALL BE VIRGIN WOOD FIBER, FREE OF GROWTH OR GERMINATION INHIBITING SUBSTANCES. MULCH SHALL BE AIR DRIED WITH NO MORE THAN 15% MOISTURE BY WEIGHT. TOTAL ORGANIC WEIGHT SHALL BE A MINIMUM OF 98%. INORGANIC ASH CONTENT SHALL BE 0.7+/-0.2 PERCENT. WATER HOLDING CAPACITY SHALL BE 1000G/100G (OVEN DRIED WEIGHT BASIS). PH RANGE SHALL BE 4.0-8.0. FIBER LENGTH SHALL MEET THE FOLLOWING:

30% MINIMUM SHALL BE AT LEAST 0.15 INCHES IN LENGTH OR LONGER

50% MINIMUM SHALL BE RETAINED ON THE 28 MESH SCREEN.

B. SEE PLANT SCHEDULE FOR SEED MIX.

C. PROVIDE WRITTEN CERTIFICATION THAT SEED CONFORMS TO UTAH SEED LAW IN COMPLIANCE WITH UTAH STATE DEPT. OF AGRICULTURE REGULATIONS.

D. ORGANIC TACKIFIER SHALL BE "M-BINDER" AS MANUFACTURED BY ECOLOGY CONTROLS, "TYPE-M" AS MANUFACTURED BY AGRO TACK, "STA WET" AS MANUFACTURED BY POLYSORB, INC. OR APPROVED EQUAL.

E. APPLICATION RATE PER 1000 SQUARE FEET IS AS FOLLOWS:

1. 35 POUNDS OF WOOD FIBER MULCH.

2. SEE PLANT LIST FOR POUNDS OF SEED MIX PER 1000 SQUARE FEET

3. 2.5 GALLONS OF ORGANIC TACKIFIER.

4. 92 GALLONS OF WATER (MINIMUM).

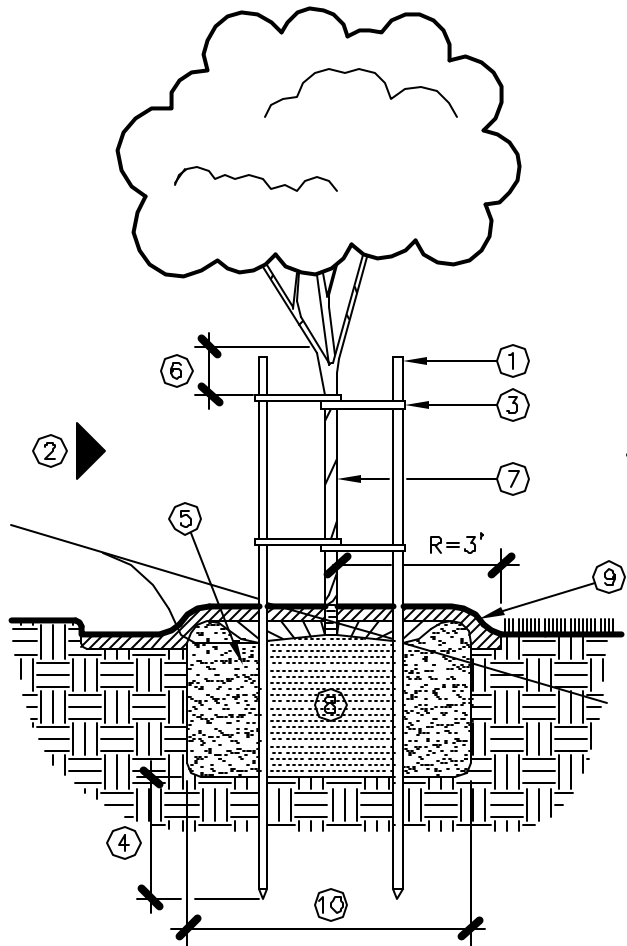
F. THE WOOD FIBER MULCH, SEED, TACKIFIER AND WATER SHALL BE MIXED TOGETHER IN A HYDRO SEEDING MACHINE HAVING A CAPACITY OF AT LEAST 2,000 GALLONS TO ALLOW FOR A HOMOGENEOUS SLURRY WHICH IS THOROUGHLY MIXED AND CAN BE APPLIED EASILY WITHOUT CLOGGING. THE MACHINE SHALL BE MOUNTED ON A TRAVELING UNIT WHICH IS EITHER SELF-PROPELLED OR DRAWN BY A SEPARATE UNIT. EQUIPMENT USED IN THE HYDRO SEEDING PROCESS WILL BE THOROUGHLY CLEANED OF ALL SEED AND OTHER MATERIALS USED IN ANY PREVIOUS HYDRO SEEDING PROCESS, PRIOR TO HYDRO SEEDING ON THIS PROJECT.

G. THE EQUIPMENT SHALL HAVE A BUILT-IN AGITATION SYSTEM AND OPERATING CAPACITY SUFFICIENT TO AGITATE, SUSPEND AND HOMOGENEOUSLY MIX A SLURRY CONTAINING NOT LESS THAN 44 LBS. OF ORGANIC MULCHING AMENDMENT PLUS CHEMICAL ADDITIVES AND SOLIDS FOR EACH 100 GALLONS OF WATER.

H. THE SLURRY SHALL BE PREPARED AT THE SITE AND ITS COMPONENTS SHALL BE MIXED TO SUPPLY THE RATES OF APPLICATION AS SPECIFIED. SLURRY PREPARATION SHALL BEGIN BY ADDING WATER TO THE TANK WHEN THE ENGINE IS AT HALF (½) THROTTLE. THE ENGINE THROTTLE SHALL BE OPEN TO FULL SPEED WHEN THE TANK IS HALF (½) FILLED WITH WATER. ALL ORGANIC AMENDMENTS, FIBER AND CHEMICALS SHALL THEN BE ADDED BY THE TIME THE TANK IS TWO THIRDS (2/3) TO THREE FOURTHS (3/4) FULL. AT THIS TIME, SEED MIX SHALL ALSO BE ADDED AND NOT BEFORE THIS TIME. SPRAYING SHALL COMMENCE IMMEDIATELY WHEN THE TANK IS FULL AND THE SLURRY IS MIXED.

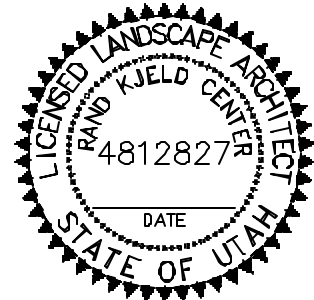
I. APPLY HYDROSEED TO FORM EVEN APPEARING COVER OVER REQUIRED AREAS. THE SLURRY SHALL BE APPLIED IN A DOWNWARD DRILLING MOTION VIA A FAN STREAM NOZZLE. IT IS IMPORTANT TO ENSURE THAT ALL OF THE COMPONENTS ENTER AND MIX WITH THE SOIL. USE ONLY QUALIFIED AND TRAINED PERSONNEL TO ENSURE UNIFORMITY OF THE HYDROSEED APPLICATION.

J. THE HYDRO SEEDING SLURRY COMPONENTS SHALL NOT BE LEFT IN THE HYDROSEED MACHINE FOR MORE THAN TWO (2) HOURS IN ORDER TO AVOID SEED DETERIORATION.



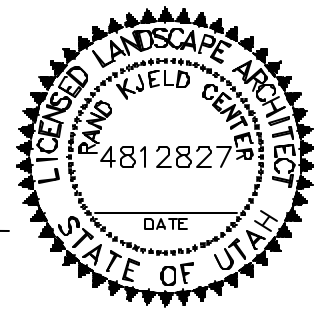
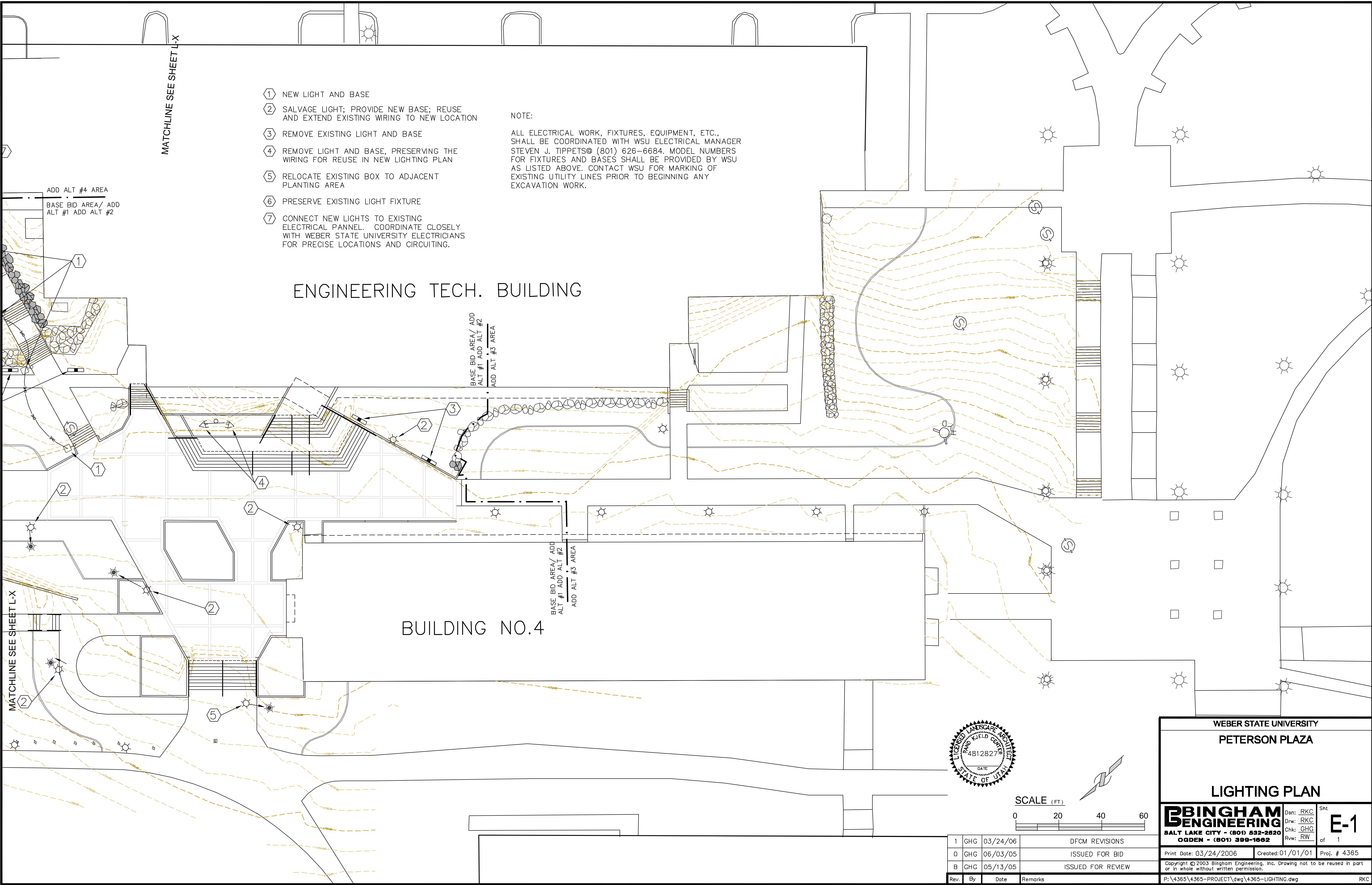
- 1 2" DIA. x 10' STRAIGHT WOODEN STAKE (2 REQUIRED)
- 2 PREVAILING WIND DIRECTION
- 3 V.I.T. CINCH-TIE VINYL TREE TIE (2 PER STAKE, LENGTH AS REQ'D). SECURE TO STAKE W/GALV. NAIL, 1 PER TIE
- 4 24" MIN.
- 5 SEE TREE/SHRUB PLANTING DETAIL
- 6 6" MAX.
- 7 TREE TRUNK
- 8 ROOTBALL
- 9 3" LAYER SHREDDED BARK MULCH AROUND EACH TREE IN 3' RADIUS CIRCLE (WHEN IN TURF)
- 10 3x ROOTBALL DIA. MIN.

A DOUBLE TREE STAKING NTS



1	GHG	03/24/08	DFCM REVISIONS
0	GHG	06/03/05	ISSUED FOR BID
B	GHG	05/13/05	ISSUED FOR REVIEW
Rev.	By	Date	Remarks

WEBER STATE UNIVERSITY			
PETERSON PLAZA			
PLANTING NOTES			
B BINGHAM ENGINEERING SALT LAKE CITY - (801) 532-2620 OGDEN - (801) 589-1662		Den: _____ Drw: _____ Chk: _____ Rvw: _____	Sht P-7 of 7
Print Date: 03/24/2006		Created: 01/01/01	Proj. # 4365
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1	GHG	03/24/06	DFCM REVISIONS
0	GHG	06/03/05	ISSUED FOR BID
B	GHG	05/13/05	ISSUED FOR REVIEW
Rev.	By	Date	Remarks